Turbo Board ST
Version 2

Bulletin Board Software
for the Atari ST
Computer

by William Miller

Copyright 1990, 1991

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Dear Turbo Board Sysop,

Thank you for purchasing Turbo Board Version 2. The Atari ST market is a limited one, and the Atari BBS market is even smaller, so every sale is important to us. We hope that you enjoy running our programs, and we would also like to hear from you, with any comments or suggestions that you may have, that would make our software even more powerful and easier to use.

Turbo Board is not Copy Protected, but we do make one small bit of protection. It is called TKEY_2.DAT and this file will contain your Turbo Board Serial Number. This number will always be displayed when a user logs on the system or when you log on locally. Turbo Board will not work if you do not have this file properly set up. If you ran version 1 of Turbo Board, this key is set up the same way, but has a new name from the version 1 key.

```
Serial Number Data for:
ATARI CORP
04302-BAZ0353
14320b08
```

Place the Numbers shown on the above sticker and create a text file with the name of TKEY_2.DAT Enter the above two numbers EXACTLY as they are shown on the label. TKEY_2.DAT can go into either your BBS main directory or the DAT subdirectory.

If you have any problems running Turbo Board, help is only a phone call or a letter away. We also run a support conference on the Crossnet system in the Fnet, and a Sysop Conference.

Our Support BBS phone number is 416-274-1225

(After Oct 4, 1993, our area code will change to 905-274-1225)

The Crossnet Conferences are as follows:

45521	Turbo Board Sysop Conference	Lead node 18
45523	Turbo Board V2 Support Conference	Lead node 18

Send Fnet Email to the lead node (our Support BBS) if you wish to join.

Happy BBS'ing

John Miller, Turbo Board Support

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by

William J. Miller

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Dedication

This manual is dedicated to my brother Bill, for putting up with all the adversity, and when the going got tough, to have kept on programming, and not calling it quits. Bill didn't have the most fun for quite some time, and I hope he can now command the respect that he has always deserved, with Version 2 of Turbo Board ST.

Turbo Board Version 2 is the result of over a year's hard work, and dedication on the part of Bill, to see this project through to it's completion. It is a total rewrite of the Version 1 code of Turbo Board, and I hope that it will gain great acceptance among Atari ST Sysops.

Limited Warranty

The Turbo Board BBS programs are provided "as is" without warranty of any kind either expressed or implied, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose. The entire risk of as to the quality and performance of the programs is with you. Should the program prove defective, you assume the entire cost of all necessary repair or corrections. Bitblit Systems does not warrant the functions contained in the programs will meet your requirements or that the operation of the programs will be uninterrupted or error free. Due to the continuing nature of program development, not all functions of the programs may work as described in this publication, but may be modified at any time by Bitblit Systems.

User Licensing Agreement

This program is sold to the end user under the agreement that the end user will not copy or distribute copies of this manual or of any of the Turbo Board programs contained on the release disk. If an end user is found to have violated this agreement, then the end user can be held liable for prosecution under Federal and International Copyright laws. Bitblit Systems will NOT support any end user found to have pirated our programs or documentation.

About Turbo Board

Turbo Board is written in the C language using the Borland (German) Turbo C for the ST compiler. Turbo C was used since it creates very fast executing code, that is small in size compared to other Atari C compilers. It also gave us the excuse to use the name Turbo in our board's name (grin). Turbo Board ST and Turbo Board Version 2 were created by Bill Miller (naturally).

About this Document

This manual was created using the ST Wordperfect program on an Atari Mega ST4. It was printed out using UltraScript to the Atari SLM804 Laser printer. I toyed with the idea of using Calamus for the output, but UltraScript did such a good job, that there was no need.

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Notes

Introduction to Turbo Board ST Version 2

Welcome to the growing family of Turbo Board ST owners! Turbo Board ST is a highly versatile system with many outstanding features. This power may confuse a new SysOp (System Operator) but hopefully this manual will cover each feature with enough clarity that even a novice can easily set up and run a BBS (Bulletin Board System). Version 1 of Turbo Board, was good, but Version 2 is even better, and incorporates many new enhancements over Version 1.

Since Turbo Board Version 1 was first released, we have had much feedback from the Sysops who run it. Many of the suggestions we would have liked to implement, but unfortunately, due to program constraints in version 1, we were unable to include them all. Turbo version 2 was started soon after the first version was shipping, and includes many of the suggestions that people gave to us, plus many of our own improvements to the board. It also has the advantage of a year's worth of refinement before release, so many of the problems that we found in the earlier test versions are now long gone, and we hope this program to be as solid as the original version 1 release. Some sysops have told us that they can run version 1 for over a month with no rebooting, so this is no small feat!

Some of the features of Turbo Board ST include:

- Fully configurable Menu, with the ability to create submenus and execute external programs directly from the menu.

- Up to 16 SIGs (Special Interest Groups) with each SIG's message bases separate from the others. (Up to 16 message bases per SIG for a total of 64 message bases.) Individual access control to each SIG and each message base within the SIGS.

- Messages may be uploaded, and also edited at any time. (SysOp controls edit privilege.)

- Up to 500 messages (of unlimited size) in each message base

- Nine transfer protocols, five of which are batch capable for both uploads and downloads. Ascii, Xmodem, Xmodem CRC, Xmodem 1K, Ymodem batch, Ymodem-G batch, Zmodem batch, Fmodem batch , and SEAlink batch.

- Up to 20 file transfer sections, with an unlimited number of files in each section.

- User-to-user file transfer (F-Mail) and Public Conference Fmail.

- Networking of BBSs for exchange of messages and F-Mail under the Fnet and/or Fidonet systems

- Database section for news items with individually controlled access to a each database area Users can upload Archived files, and create their own database submenus when they upload. Database files can be any name, they do not have to have special key names for the database to operate.

- 32767 access levels for both the database and file areas.

- Online help system.

- Easy BBS maintenance from both the local mode and when logged on from a remote computer (remote SysOp ability.)

- And much more as you will soon find out!

System Modules

Turbo version 2 is now what we call a Modular System. We realized with our first version, that we could only place so many routines in the bbs program, or it would grow to be too large, and we would not be able to run it on a 1mb ST and still be able to run external programs. Bill decided to break up Turbo Board into separate modules, that the BBS would only call when it required them, thus freeing up valuable system memory.

The following modules are the ones that are currently used, though more may be added in the future. Please note that these SYS files are not programs, but only bundled modules for Turbo Board, and cannot run on their own. They are all located in the new SYSTEM folder.

ARC.SYS	- Arc viewer, Arcdl module
DBASE.SYS	- New Database module
DBASEOLD.SYS	- Old Style Database (until you switch to new one)
DOORS.SYS	- OLD Style Doors Section (BBS function J)
FILES.SYS	- File System module
INIT.SYS	- System initialization module
LOG.SYS	- Logon/Logoff module
MESSAGE.SYS	- Message System module
SURVEY.SYS	- Survey System module
SYSOP.SYS	- Sysop mode module
ULDL.SYS	- Upload/download transfer protocol module

Chapter 1 - Setting up Turbo Board

Included on your distribution disk are all the menu screens you need to begin using Turbo Board right away. You may also modify the menus or create your own. Although possible to have Turbo Board set up and running in very little time, please take a few minutes to read the following section before beginning work with the program.

Pre-planning

Before you set Turbo Board up you should have an idea of what type system you will be running. There are as many types of BBSs as there are BBSs, but at the risk of generalizations the following are a few of the primary 'flavors' of BBSs.

- Message boards. This BBS will be primarily a message oriented system, with little or no file support. The users normally use aliases or 'handles' instead of their real name, and often the BBS will have some type of role-playing theme. There are probably more of these 'message boards' than any other single type as they require minimum hardware and are also popular with many users.

- Technical boards. At the other end of the spectrum is the technical users BBS. This system usually has several message areas set up for the different areas of 'expertise' on the system. File support is a common feature, normally using a HD of at least 20 Megabytes. Real names for the users are the norm rather than exception, and in fact many BBSs will not allow users access who use handles. Registration with the SysOp may be required for full access.

- Pay board. This system charges users for access to the files and extended time on the system. Since there are fewer potential users for a pay BBS (many will not wish to pay) the system is often available for those who do pay without having to fight a busy signal. This is one of the selling points for signing up for the system. A problem for the SysOp is drawing enough users to the system to make the BBS economically sound.

- Support BBS. This BBS is set up primarily to support the members of the user group but can also be a means of drawing new users into the group. File support is normally available as well as recent user group newsletters. Access to the system may be restricted to members only, open to all, or some combination of the above. BBS systems can also be used to support products, in our case, our bbs supports Turbo Board.

Those are a few of the type BBSs you will find available. At this point you should decide the format of your BBS. How many message areas will you have? How many file areas? Will everyone have access to every area, or will some areas require higher access levels? When considering the type system to establish you must also take into account your system hardware.

System Requirements

Turbo Board Version 2 requires an Atari ST 1040, 1MB or greater memory ST to properly network and run batch files. It can run on a Atari 520, but this severely limits the number of online programs that you are able to run. A hard drive system is absolutely necessary, as Version 2 will not run off floppy disks. For an average BBS system, a 40 MB hard drive system will suffice. If you are running a bbs and plan on having an extensive file section, you will require more hard disk space. With the advent of the ICD hard disk formatters, you are able to have space limited to only the amount of money that you can spend on a hard drive system. ICD's hard disk systems are highly recommended, as they have the best partitioning software available for the ST, bar none. Many other companies also manufacture their own hard disk systems incorporating ICD components and software.

Due to many problems with memory handling in older versions of TOS (TOS 1.0, TOS 1.2), we cannot guarantee the operation of Turbo Board Version 2 on these systems. If you are using older versions of TOS (desktop copyright before 1989) then we suggest you contact Atari to upgrade to TOS 1.4. Turbo Board should work on all TOS versions 1.4 and later, including the Atari TT.

Turbo Board saves messages in a circular 'ring' type format, which means the SysOp does not have to perform message base maintenance in the normal course of events. It also means the message base area is fully allocated at all times, even if there are no messages in the message base. For planning purposes every message allocated will require 1800 bytes of storage. So a message base that is allocated to have 50 messages (max) will take approximately 90,000 bytes of storage on your floppy or HD system. There are also messages that are called extended messages, that will exceed the standard message size of 20 lines. These messages are held as separate text files within the MESSAGE subdirectory. Plan on leaving enough free space on your drives for these messages.

If you are planning on networking your board through either the FNET or the FIDONET networks, also leave extra space on your drive for these programs and for the messages and files that you will receive from the net.

The password file is likewise allocated and requires 512 bytes per user record. If you initialize the system for 100 users it will require 51,200 bytes of disk storage.

For both the message bases and the password file it is a simple procedure to increase the size at a later date. Password files can also be reduced in size at a later date, but the Message bases cannot, without completely erasing all the previous data contained within the base. It is best to err on the low side when allocating number of messages on your system initialization. If you later find you would like the message base to store more messages, or have more users signing up than you originally thought, you can use the expansion options in TSYSGEN2.TOS to increase the sizes of the applicable files.

Before proceeding with the initialization you should decide the following items:

How many drives will be accessed by Turbo Board? This may be changed at a

latter date easily, but you need to decide which will be used by Turbo Board initially.

What will the search order be for Turbo Board when looking for a file? If all your text files are on drive C and your download files are on drive D, then you would normally want to search drive C before D when looking for files.

If you will be having file upload and download support, what will your file area names be? Each file area will have a 'long' name used for menus and a 'short' name that is the name of the folder the files are located in.

Some further explanation of the file area names is in order. Turbo Board has not only file areas but also file categories. You may have up to 20 file categories within your file areas. Users may search for files by category type, so separate file areas for different classes of files is not required. An example will probably help you to understand this concept.

If you were setting up the BBS to support multiple computer types, say the Atari 8-bit computer, the Atari ST and the IBM, then you would want separate file areas for each of these computers. Within each file area you could have categories such as Games, Communications, Utilities, etc. Only three file areas would be required. The names of the file areas could be "Atari ST files", "IBM PC files", and "Sysop files". The short folder names could be STFILES, PCFILES, and SYSOP. Short file area names are a maximum of eight characters.

Turbo Board uses sub-directories (folders) for many of the files associated with the BBS. You can have separate folders for your message files, survey files, text, and graphics files, batch files, and most of the data (.DAT) files.

The 'news' section of Turbo Board is termed the Database section. The main section can be named TDBASE, but you may choose any folder name for the Database section that you like, as well as any other sections with the restriction that the names used by Turbo Board for accessing these areas be eight characters or less. (The names will be the names of the folders the files are in.)

On our support BBS the Database folders are named:

BULLETIN - Our bulletin Database
TDBASE - Our general Turbo Database
DBTURBO - Our Turbo Sysops Database
DBSYSOP - My private database, containing log files

The database section will be discussed in-depth in a later section, for now decide how you will initially set up Turbo Board.

In Chapter 12 are sample work sheets to help you set up your BBS. Please make copies of the pages in Chapter 12, and complete the work sheets now or at least determine what the answers to the work sheets would be before proceeding with the initialization.

Initialization

STEP 1: Backing up the Distribution disk

The first thing you should do is make a backup copy of your distribution diskette. Format a blank diskette and follow the instructions in your ST user's manual for duplicating a disk. Put your distribution diskette in a safe place, away from magnetic fields, and label your backup distribution diskette as "Turbo Board Distribution diskette". From now on when the instructions ask you to perform a function with the distribution diskette it is referring to the backup copy you just made. You may also want to back up the shareware disks that were also provided in the release package.

STEP 2: Copying the Turbo Board files

Place the distribution diskette in drive A. Open a window to your root dir of your system drive (usually C:). If you are going to use a BBS folder, now is the time to create it. It is best to simply name this folder BBS or TURBO. Now drag the A drive icon over to the open window that is your Default BBS directory on your hard disk. If running Turbo Board from the root directory then place the pointer on the open window showing your HD root dir. If you will be using a folder for the Turbo Board files then drag the files to the folder icon on your HD.

If you are upgrading from Turbo Board Version 1, you do not have to copy the TXT directory over, but instead copy the NEW_TEXT directory contents into your present TXT directory. In the DAT directory you only need to copy over the BULLETIN.TDB, MENU.DAT and SIGS.DAT files to your DAT directory. Copy over the BULLETIN directory, it is a sample Bulletin database for the new Turbo Board version 2 database. Copy over all other files to your BBS directory on your hard disk.

STEP 3: Modifying TURBO.OPT

Note: When editing files for use by Turbo Board it is important that the editor NOT add any blank lines and that you not use special characters, such as the TAB key or formatting commands, if the editor inserts those characters in the text. If you use a word processor program, make sure that you save the message as a text file. We use a Text Editor called Tempus.

Load the file TURBO.OPT from the distribution diskette into any suitable text editor you have available. This file is shown in Figure 1 on the next page. As you can see there are many 'options' for Turbo Board available to you.

The first line is labelled BAUD. The following entries may be placed on this line:

300 1200 2400 9600 HST

The above rates are the Connect rates recognized by Turbo Board. If your modem's highest connect rate is 2400, then you would place 2400 on this line.

Turbo Board will set the BBS to the modem's connect rate on an incoming call.

There is one further option that you may wish to use here, and it is known as the HST option. If you place HST on the BAUD line, then Turbo Board will assume the following conditions:

You are using a high speed, error checking modem and you wish to use the BBS set at a fixed link of 19200 bps, running under RTS/CTS Flow Control, to control the data flow to the modem.

All 9600 modems that we have seen will operate under this mode. The most popular 9600 error checking modem in use by SysOps seems to be the US Robotics HST modem. V.32 and V.42 9600 modems can also use this method of control. For the HST modem, you must set the modem's Nram using a terminal program set at 19200. Enter the following codes and hit Return to set the HST up properly:

AT &H1 &R2 &B1 &A0 V1 E0 Q0 S7=15 S15=8 &W

The above codes will set up the flow control and also make sure that the HST is reporting back the proper codes to the BBS. Read your modem manual for more details on these commands.

TURBO.OPT

HST	BAUD
ON	HARD DISK INIT.
OFF	RESET LOG AT INIT.
OFF	SET TIME AT INITIALIZATION
CDEF	DRIVES (SEARCH ORDER)
C	DRIVE TO PLACE DISK LOG
ON	REMOTE SYSOP ACCESS
OFF	GRAPHICS
1	COMPORT (NOT USED)
OFF	NOT USED
ON	ADDRESS FILE
ON	CHAT
0900	CHAT ON TIME
2200	CHAT OFF TIME
ON	LOG TO DISK (PRINTER LOG OFF)
OFF	GUEST PASS
OFF	ACCOUNTING (MONTH END)
OFF	ACCOUNT NUMBERS
ON	GET USER AGE
OFF	NEW USER SURVEY
ON	EMAIL DELETE
ON	MESSAGE TO SYSOP AS EMAIL
OFF	UPLOAD SYSOP
ON	BULLETINS AT LOGON
ON	UPLOAD NOCHARGE
1200	MINIMUM BAUD RATE
ON	USE UL/DL RATIO

1	RATIO (NOT USED, SET IN TPAS.DAT)
200	IDLE TIMEOUT (SECONDS)
14	FMAIL DELETE (DAYS)
\BBS\	MAIN BBS DIRECTORY (SINGLE \ IF BBS ON ROOT DIR)
MESSAGE\	MESSAGE SUBDIR (NOTE THE ABSENCE OF LEADING \)
SURVEY\	SURVEY SUBDIR
TXT\	TEXT AND GRAPHICS FILES SUBDIR
DAT\	DAT FILE SUBDIR (OPTIONAL)
OFF	TURN SCREEN OFF BETWEEN CALLERS
AT S7=60 DT	RINGBACK DIALING CMD (LOCAL CALL)
AT S7=60 DT 1	RINGBACK DIALING CMD (LONG DISTANCE)
0400	CLEANUP TIME (EMAIL CLEANUP / RUN FMAINT.BAT)
OFF	FNET ENABLED
0000	FNET START TIME
0000	FNET END TIME
0	NET NODE NUMBER -ASSIGNED BY ATARI-OH! NODE 3
Turbo Board ST Version 2	FNET NODE NAME (30 CHARS LONG)
1	MESSAGE BASE FOR NON-EMAIL FNET TRANSFERS
1	FNET VIA MESSAGE BASE FOR TEMP STORAGE
C:\BBS	PATHNAME FOR DORINFO1.DEF FILE
ON	USER DEFINED GREETING MESSAGE
OFF	FORCE USER TO READ EMAIL ON LOGIN
ON	SAVE NEW USER AFTER NEWUSER.TXT DISPLAYED
ON	TYPE FILE FROM LZH,ARC - NEED LHARC,ARC.TTP
BAT\	.BAT FILE SUBDIR (OPTIONAL)
OFF	READ SCREEN COLOURS FROM TOS ENV. MEMORY
ON	REDIRECT UNKNOWN EMAIL TO SYSOP
ON	FILE DATE STAMP CHECK WHEN LISTING NEW FILES
10	LOCAL INACTIVITY TIMEOUT (IN MINUTES)
	S=SNOOP MODE OFF L=KEYBOARD LOCK ON
0	BATCH UPLOAD DIRECTORY NUMBER (0 = DISABLE)
ON	BBS HANDLES ON/OFF
mm-dd-yy	DATE FORMAT USED
256	ENVIRONMENT MEMORY SIZE (BYTES)
2	ANSWER ON n NUMBER OF RINGS

** WARNING: DO NOT CHANGE THE ORDER OF THE ENTRIES IN THIS FILE!
THEY ARE READ IN ORDER!

HARD DISK - If you are using a hard disk and will be booting Turbo Board from the HD, then change the OFF in line two to ON. If OFF, Turbo Board will ask you to insert your Data disks when the system boots.

RESET LOG - Line three is used in conjunction with the Log-to-disk feature. If your log is being kept on the disk and you want the log to be reset each time Turbo Board is run then leave the word ON in place. If you wish the log to be continuous, with the new data appended to the old, then replace ON with OFF.

SET TIME - If you wish to be prompted to set the time and date when the board intializes, enter ON here.

DRIVES - On this line place the drives you desire Turbo Board to use, and in the order you wish Turbo Board to search them for files. Example: If you have two drives, A and B, for use with Turbo Board, then change line five to AB. If you were using a HD and a floppy, you would probably want Turbo Board to search the HD first, so you would enter a search order similar to CDA for a single floppy and two partition HD.

LOG DRIVE - is the drive identifier of the drive you want Turbo Board to save the user log to when you are not using a printer.

REMOTE SYSOP - is a master switch of whether Turbo Board will allow users with the SysOp privilege to activate the SysOp mode when calling in. Replace the OFF with ON if you will be allowing this feature.

GRAPHICS - For now leave this OFF. It will be covered in the Using Alternate Menus section.

COM PORT - Turbo Board ST users leave this set to 1.

NOT IN USE - This is a flag for future use. It is not currently implemented and should be left OFF.

ADDRESS FILE - Turbo Board can automatically ask for user's street, city, state and zip code. If you wish your users to be queried for this information, change the OFF to ON.

CHAT - Enables/disables the chat request function of the BBS. (See the Main Menu and SysOp sections for more information.)

CHAT ON TIME - If you have Chat enabled the actual time Chat will be active is controlled by the CHAT ON and CHAT OFF TIMEs. Enter the start time for chat to be active. While chat is active and a user requests a chat the BBS will ring the system bell and the bell on the printer if the system LOG TO DISK is OFF. If you desire chat to be active all the time enter a time of 0000.

CHAT OFF TIME - Sets the time Chat will cease functioning. Set to 2400 for chat to always be active.

LOG TO DISK (NO PRINTER) - ON will maintain the system log in a file on the log drive, OFF will send the log to the printer.

GUEST - Enables/disables guest log-on. If on, a user may enter a first name of Guest and the system will allow him/her access as a level 0 user and will not ask for last name, address or age information.

ACCOUNTING - If ON, a monthly summary of user activities will be printed out at midnight of the last day of each month. The user statistics (time, uploads/downloads, etc) will also be reset. If OFF, no summary will be printed and the user statistics will continue to accumulate, with the exception of the monthly connect time which is reset.

ACCOUNT NUMBERS - If ON new users will be asked to enter an account number when signing up. This number is not currently used by Turbo Board. You do not need account numbers active in order to have accounting enabled.

GET USER AGE - You may set to OFF for Turbo Board to not ask for a new user's age.

NEW USER SURVEY - If ON Turbo Board will present new users with survey number one. (See Survey section in the main menu)

EMAIL DELETE - E-Mail is automatically deleted by Turbo Board after it has been read by the addressee. This deletion can take place when the user logs off or at the system batch maintenance time. If performed at batch maintenance time it will continue to show the user that he has E-Mail each time he logs on prior to the maintenance being accomplished. Use ON to delete E-Mail when a user logs off after having read his mail, OFF to delete E-Mail at batch maintenance time.

SYSOP EMAIL - If ON, a message to SysOp will be left as E-Mail to the SysOp. If OFF then the message will be sent to the system log.

UPLOAD SYSOP - If ON, files uploaded to the BBS by the users will be set to access level 32767. An access level of 32767 is the SysOp's access level, making the file viewable only to the SysOp until he reviews it and modifies the access level. IF OFF the user will be asked to set the access level for the file.

BULLETINS - Turn ON to show users the System Bulletins, OFF to skip the Bulletins at log-on. (See Database section for the details on System Bulletins.)

UPLOAD NOCHARGE - When a user uploads a file, you can have the time spent performing the file transfer not counted against his time limits. If ON, the time will not be counted, if OFF it will be counted.

MIN BAUD RATE - Set to the minimum rate that you wish callers to use when calling your BBS. If you set this line to 1200, then only callers using a 1200 baud modem or higher will be able to log on your board. Users at a lower connect rate will see a message stating that they have no access to the board. See CONTIME.DAT

USE UL/DL RATIO - ON will mean the number entered in the next line will be used to determine if a user may download a file. If the user is past his number downloaded for number uploaded and the UL/DL ratio is enabled, then he will not be allowed to download a file until he uploads one. For a ratio of 10:1, once a user has downloaded 10 files, he may not download another until he has (at some point) uploaded a file. If the user has uploaded two files, then he may download thirty files before the system will tell him he has exceeded his UL/DL ratio (remember, the first 10 were 'free'). If accounting is turned on, then the UL/DL information is reset at the end of the month and the user may again download files without uploading.

UL/DL RATIO - This ratio is no longer set here, but in the user's password file entry for ratio. This will be covered later.

TIMEOUT - This is the number of seconds of inactivity to wait before logging the user off for exceeding the idle user time limit.

FMAIL DELETE - The number of days for F-Mail to be maintained by the system before deleting. F-Mail will also be deleted once it has been downloaded by the recipient. (See the F-Mail section under Main Menu for further information.)

MAIN BBS DIRECTORY - If you are running Turbo Board from within a folder then enter the name of the folder here, with BOTH leading and trailing backslashes. ie., If running from a folder named BBS, then enter \BBS\. If you are running Turbo Board from a root directory then leave a single \.

MESSAGE SUBDIRECTORY - You may place your message files inside folders. This keeps your main BBS directory, or root directory if not using a default BBS subdirectory, from becoming cluttered with files. Enter the name of your message subdirectory here, with ONLY the trailing backslash. ie. MESAGE\

SURVEY SUBDIRECTORY - Likewise, you may place all your survey files inside a directory (folder). Again, enter the name here, with only the trailing backslash, or leave blank if not using this optional folder.

TEXT AND GRAPHICS FILES SUBDIRECTORY - Blank, or the name of a folder where your text and optional graphics files are maintained if you desire to use this feature.

ALTERNATE DIRECTORY FOR .DAT FILES - The final optional folder the system can use is for many of the files with the .DAT extension. Note: If used, you still must keep the files CONFIG.DAT, HELP.DAT, HELP.IDX, PAS.DAT, PAS.IDX, and VALIDATE.DAT in the main BBS folder or root directory if not using a folder.

SCREEN SAVER FEATURE - If you would like the screen to be blanked while no user is on the system, enter ON on this line. If OFF is used then the screen will be kept on at all times. Note: It is highly recommended that this feature be left OFF until you are familiar with Turbo Board and have your system running reliably.

RINGBACK DIALING COMMAND (LOCAL CALL) - This is the string to be sent to the modem with the user's phone number if the ringback feature is used and the call will be a local call. See the Ringback section under the Main Menu for details.) You can have a maximum of 30 characters for your modem on this line.

RINGBACK DIALING COMMAND (LONG DISTANCE) - Same as above, but for long distance calls.

CLEANUP TIME - When the clock time equals the time entered on this line the system will log any user currently on the BBS off and commence system maintenance. The system maintenance consists of E-Mail cleanup and any commands you have in the text file FMAINT.BAT

FNET ENABLE - If you are using the Fnet system to send and receive messages and F-Mail files automatically with other BBSs, then enter ON here, otherwise leave as OFF. IF ON, then your node number will be shown in the log-on header and from FNET START TIME until the FNET END TIME no users will be allowed on the BBS.

FNET RECEIVE ONLY START TIME - This is the start of the time period when Turbo Board will only allow other BBSs to call for exchange of Fnet information. It is not the time your BBS will dial out, that is set by the CLEANUP TIME line.

FNET RECEIVE ONLY END TIME - End of the time period when Turbo Board will only allow other BBSs to call. If FNET ENABLE is OFF then the START and END times are ignored.

FNET NODE NUMBER - If using the Fnet feature you MUST first be issued a node number by Dave Chiquelin at the Atari OH! bbs in Texas. Once you receive this number enter it here. See the documentation on the Fmailer in for more details. For now, enter a 0 in this position if you do not have an FNET node number.

FNET NODE NAME - This is an up to thirty character name for your BBS that will be shown on the log-in header if Fnet Enable is turned on. Do not 'line up' the second column (the text FNET NODE NAME) by moving it over to the left. This field is 30 characters wide and if you move it over part of it will be sent with your Fnet name on the messages that are delivered by the Fnet system.

DEFAULT MESSAGE BASE FOR NON-FMAIL FNET MESSAGES - Fnet F-Mail and E-Mail messages received will be saved in the E-Mail section. Other messages will try to be saved in the best match of the message base on your board to the message base the message came from. If there is no 'best match', then the messages will be saved on the message base specified on this line. Enter the number of the message base for these messages.

VIA MESSAGE BASE FOR IN-TRANSIT FNET MESSAGES - The Fnet system can send messages to your BBS for you to forward to another BBS. These 'VIA' messages can clutter up your normal message bases and cause the messages between your users and between your BBS and the other BBSs to scroll off sooner than they normally would. For this reason you have the option of setting up a separate message base to store these in-transit messages. You may use one of your normal message bases instead of a separate unique base. Enter the number of the message base to be used for this purpose on this line.

DOORINFO.DEF DIR- This line shows the destination directory for the doorinfo.def file written for doors games. It is usually placed in the default bbs directory. Note there is no \ at the end.

USER DEFINED GREETING MESSAGE - This option will allow your registered users to leave a short 5 line greetings that will appear before the Main Menu, or the Bulletins if they are enabled to appear.

FORCE USER TO READ EMAIL - This option will force all users directly into the EMAIL system if they have either EMAIL or FMAIL waiting for them.

SAVE NEW USER AFTER NEWUSER.TXT - If you like, turning this option on will prompt a new user to save his password just after the new user text is displayed. If the user chooses not to save his password, he will be allowed on the board at a 0 access level, and will still be prompted again at logoff to save his access a second time.

TYPE TEXT FILE - This option will allow a user to type any text file that may be contained in either an ARC or LZH file, and display it on the screen. If you enable this option, make sure you have LHARC.TTP and ARC.TTP also present in the main bbs directory. (Use ARC 6.02 and rename it to ARC.TTP.) Make sure you name these arcing utilities properly or Turbo Board will not be able to locate them. If you do not have these programs, they are available on our support bbs and many other BBS's or online services.

BATCH FILE SUBDIRECTORY - This is an optional directory, but if you have many BAT files lurking around or you run Binkleyterm, this may be a good idea to use. Note the trailing backslash (\) like the other subdirectories. Leave this entry blank if you don't wish to use this sub directory.

READ SCREEN COLOURS FROM TOS ENVIRONMENT MEMORY - This rather long description merely asks if you would like to have Turbo Board read the desktop colours that you have hopefully saved in DESKTOP.INF after you adjusted them with the CONTROL.ACC. If so, turn this option on, if not, turn it off.
Turbo Board will set the colour palette you saved, even if the Control panel is not present. Set this to OFF if you are using a MONO monitor.

REDIRECT UNKNOWN EMAIL TO SYSOP - This option will redirect any Fnet Email to the Sysop if it is addressed to an unknown person. It will also redirect any email to the sysop if the addressee was deleted from the system.

FILE DATE STAMP CHECK WHEN LISTING NEW FILES - This function looks at the date stamp of the FIL directory files as a quick check if there have been any new uploads since the last time you looked. Useful for TOS versions 1.4 and greater only, but we don't recommend that you run Turbo Board on older TOS versions anyways.

LOCAL INACTIVITY TIMEOUT - This entry will determine the length of time that your system will sit waiting for an input when you have logged on locally.

S=SNOOP MODE OFF L=KEYBOARD LOCK ON - This is a DUAL option line, the first option S will default the screen to a Snoop mode off, and the second option L will turn on the local keyboard lockout. Merely place either or neither of these letters on this line to enable or disable these functions. How do you lock the keyboard? Use <Control>-<Clr Home> to toggle on and off the lock.

BATCH UPLOAD DIRECTORY NUMBER - The number that you enter here 0-20 will determine which download directory that you wish to use as a batch upload directory. Since there are 20 directories, if you enter 0, Batch Uploading will be disabled.

BBS HANDLES ON/OFF - This option sets whether you want to use the Handle (alias) system or just use real names on your bbs.

DATE FORMAT USED - This sets the Date format. We use mm-dd-yy

ENVIRONMENT MEMORY SIZE - This is used for programs like Binkleyterm, a Fidonet mailer. Just leave it set to 256 for now.

ANSWER ON n NUMBER OF RINGS - Since Turbo Board now answers the phone line instead of a modem auto-answer, you can set the number of rings the board will wait before it picks up the line.

All done? Then save your new TURBO.OPT file and place it on the same disk and inside the same folder as TURBO2.PRG. This file will be read by Turbo Board and the SysGen program when they start to run so they will know your default settings and where to find all of your system files.

STEP 4: Running the Turbo System Generator

* Note *

If you are converting over from Turbo Board Version 1 or Forem ST, then you do not need to yet run the TSYSGEN2.TOS program at this time, but please read this section anyways for later reference. Please proceed to STEP 4A: Running the UPDATE.PRG

<u>To Create a New BBS</u>

You will now create your password file and message base files for the BBS. You should have the necessary information in the work sheet you filled out in the pre-planning section.

Double click on TSYSGEN2.TOS. From now on when the instructions advise you to RUN a program select the file icon and double click on it or use the file menu selection in order to run the program on the Atari ST.

You should now see following screen:

///Turbo Board ST System Generator
Ver 2.01
By Bill Miller
Copyright 1990, 1991, Bitblit Systems

A - Initialize System
B - Add a message base
C - Rename a message base
D - Delete a message base
E - Expand a message base
F - Reinitialize a message base
G - Rebuild message base IDX ISM
H - Check message base integrity
I - Change next message number
J - Expand/Compress password file
K - Reinitialize password file

@ - Show command line options

L - Rebuild password IDX file
M - Delete a password entry
N - Change caller number
O - Reset high message counters
P - Add download directory
R - Remove download directory
S - System checkout
T - Set screen colours
U - SIGS compiler
V - Main menu organizer
W - Rebuild HELP.IDX file

Q - Quit

///Turbo SysGen>

Select option A from the SysGen menu (Initialize System).

SysGen will read the TURBO.OPT file, and will check the drives that you have specified as being online. If you have created a BBS directory and various system subdirectories, SysGen will also create them for you on all drives specified in TURBO.OPT.

The next prompt from the SysGen program will ask for the number of users to allocate space for. Enter your starting number, remembering that it is easier to add additional password space later than it is to decrease the password file size. The maximum number of passwords allowed is 2,000. The SysGen program will create the TPAS.DAT, TPAS.IDX and MASK.DAT files based on the size you have allocated. Turbo Board uses the .DAT extension for DATA files, and the .IDX extension for the INDEX files associated with the DATA files. The MASK.DAT file is used to store validation masks which will be covered later.

Following the Password initialization, you will be asked for the number of messages to allocate for the E-Mail section. E-Mail is separate from the other message bases in Turbo Board, with all E-Mail being locked (private) and users alerted to any E-Mail waiting for them when they log on. If the E-Mail section is full the system will not delete the oldest message as in the standard message bases, but will instead not allow new E-Mail to be entered. E-Mail is deleted after it is read by the addressee. You may allocate up to 500 messages for E-Mail.

Next the program will ask for the number of message bases to initialize. You may have up to 64 message bases, provided you have enough disk storage space. For each message base you will be asked for the name you will call the message base and the number of messages to create space for. Each message base name may be up to 40 characters long, and each message base may have a maximum of 500 messages. The program will generate MESAGEx.DAT, MESAGEx.ISM and MESAGEx.IDX for each of your message bases. The 'x' in the name is the number of the message base, as in MESAGE1.DAT for message base one.

SysGen will next ask for the number of download category sub-directories, and then the name for each directory. Enter the short name from your work sheet completed in the pre-planning section. Remember, eight characters maximum for the directory (folder) names you will be using. It will also create all the necessary folders on each drive, and initialize each directory.

The last question to answer is the starting caller number for your BBS. If you have been running another BBS system you can enter the last caller number from your old system to maintain continuity. To use 0 simply press the Return key.

SysGen will now save the configuration data in a file named CONFIG.DAT and return you to the main SysGen menu. Exit SysGen by typing the Q character (or X if you like).

STEP 4A: Running the UPDATE.PRG

* Note *

This step is not necessary if you are creating a new Turbo Board System, so if this is the case, proceed to STEP 5.

Updating from Turbo Board Version 1 or Forem ST

If you are converting your system over from Turbo Board Version 1 or Forem ST, you will have to run the UPDATE.PRG to convert your password and file directories into the Version 2 format.

Start UPDATE.PRG and it will then convert your old PAS.DAT, VALIDATE.DAT, and *.DIR files to the new version 2 format. Please note that your old files will be untouched, as Version 2 uses new filenames for these files. The *.DIR files will be read from each file subdirectory, and the resulting new *.FIL file (one for each file section) will be located in the DATA subdirectory. It is up to you to remove the old files, as the UPDATE program will not erase them. Please ensure that you leave an adequate amount of free space on your main bbs partition, as all the *.FIL files will be created on this partition. You may estimate the free space required by adding together the file sizes of all your present *.DIR files. If you have created a DATA subdirectory on each drive, you may move the *.FIL (File System Directories) files around after they have been created, if you do not wish them all on one partition.

Files Converted:

PAS.DAT	--->	TPAS.DAT
PAS.IDX	--->	TPAS.IDX
VALIDATE.DAT	--->	MASK.DAT
*.DIR	--->	*.FIL (Now located in the DATA subdir)

You are now ready to continue to STEP 5: Modifying MODEMDAT.TXT

STEP 5: Modifying MODEMDAT.TXT

* Note *

If you are converting from Turbo Version 1 or Forem ST, you WILL have to reconfigure your modem and edit your MODEMDAT.TXT file. Please read on for more information.

Included on the distribution diskette is a file named MODEMDAT.TXT This file is used to tell Turbo Board the commands to give your modem. You may use any text editor, or the editor built-in to Turbo Board for editing the file. The file included is set up for the industry standard AT command set. A modem that uses the AT command set is recommended for use with the BBS, as some of the features of Turbo Board will not work with other command-driven modems. One example is the auto baud rate detect. When a user logs on to the BBS it will adjust to their baud rate automatically IF the modem supports the AT command set and returns the proper verbose codes (ie CONNECT 9600).

The first line of MODEMDAT.TXT is the escape code to put the modem into command mode. ("+++" for normal AT modems) The second line is a command sent to the modem by Turbo Board before it begins waiting for a caller. ("AT V1 E0") The last line is the command sent to the modem to hangup the user. ("AT H0")

Note: If you are using a Hayes 2400 compatible modem that does not have set-up switches, then line two should contain the command "&C1" after the "AT". This will turn off the DCD on all the time. Example: "AT &C1 V1 E0"

* Note *

Turbo Board answers the line, NOT the modem!!! Make sure that the Auto Answer on your modem is turned off! Turbo Board answers the line, and not the modem so a caller will never be able to connect if the board has crashed, possibly due to a power failure. Also make sure that you give the modem adequate time to wait for carrier once Turbo Board answers. Turbo Board will automatically hang up the line if carrier is not established in 15 seconds.

The modem set-up should include:

Echo commands while in command state	: NO
Force carrier detect on	: NO
Force DTR control line on	: NO
Turn Auto Answer OFF	: YES
Send VERBOSE result codes	: YES

A good safety precaution available on some modems is the ability to have the modem always hang up when the escape to command mode signal (+++) is received. This prevents someone from taking control of your modem remotely. If your modem has this capability it is suggested that it be turned on.

Setting up a USRobotics HST Modem

We have had so many questions from people on how to set up the HST modem, that I have devoted a section to it here. If you are running a V.32 or Dual Standard modem, they are set up similarly. Check your modem manual for details.

I will discuss both HST flow control and normal mode here. The following text is from my HST modem after doing an AT I4 to display the current settings (I first did an ATZ to reset the modem)

FOR FLOW CONTROL (HST) OPERATION:

USRobotics Courier 14400 HST Settings...

```
B1   C1   E0   F1   M1   Q0   V1   X6        (B0    if    V.32    modem)
BAUD=19200   PARITY=N  WORDLEN=8
DIAL=HUNT    ON HOOKTIMER

&A0 &B1  &C0 &D0 &G0 &H1  &I0  &J0  &K1  (&K3 can also be used)
&L0  &M4  &N0&P0  &R2  &S0  &X1  &Y1

S00=000   S01=000   S02=043   S03=013
S04=010   S05=008   S06=002   S07=060
S08=002   S09=006   S10=007   S11=070
S12=050   S13=000   S14=001   S15=008        (S15=000 on old 9600 HSTs)
S16=000   S17=000   S18=000   S19=002
S20=000   S21=010   S22=017   S23=019
S24=025   S25=000   S26=000   S27=000
S28=008   S38=000
```

If you make any changes to the modem Nram settings, make sure that you store them with an AT &W.

The Dip switches on your HST must also be set up properly:

1	-	UP
2	-	UP
3	-	DOWN
4	-	DOWN
5	-	DOWN
6	-	UP
7	-	UP
8	-	DOWN
9	-	UP
10	-	UP

The large Quad switch is always set UP

Regular Link Operation

If you do not wish to use Flow Control, but wish to use regular link operation, change the following Settings:

&H1 to &H0
&R2 to &R1
&B1 to &B0

Remember to save your changes to Nram with AT &W

Set your MODEMDAT.TXT file to read:

+++
AT Z
AT Z

Your HST will then be set up for proper operation.

STEP 6: Creating SIGS.TXT and SIGS.DAT

Open the file on your distribution disk called SIGS.TXT, (in the TEXT directory), into the TEXT subdirectory on your hard disk using a Text Editor, so you may edit the file.

Sample of SIGS.TXT

```
; any line starting with ';' will be disregarded as a comment

; Format of this file is:
; -SIG access
; -SIG name (40 chars)
; -SIG description, lines of text ending with '!'
; -BASE number & handles flag (HANDLES (ONLY)), Def = Real name)
; -lines of text ending with '!'
; -another BASE or '!' to end

;**** Sig #1 ****
1000
Turbo Board ST Support
==> Support Area for our BBS Software
!
2 R C
> Technical Support for Registered Owners
!
5 R
> Turbo Sysop discussions
!
4 R
> Worldwide Serious Sysop stuff here
!
!

;**** Sig #2 ****
0
General Topics Area
==> Have a look, all kinds of stuff here,
    including the SEX conference
!
1 HR
> Local and Fnet BBS news
!
3 HR
> Adventure Gaming Hints and Questions
!
6 HR
> Leave your ad here if you want to sell
!
```

```
7 H
> Serious Discussions only!
!
!

; **** Sig #3 ****
1000
Sysop Support
==> Various Sysop Support Conferences
!
5 R
> Turbo Sysop's Conference
!
4 R
> Worldwide Atari Sysop discussions
!
9 R
> Crossnet Support Conference
!
8 R
> Atari Binkley Support Conference
!
!
```

With this information, you should be able to arrange your message bases into SIGs and also leave the proper descriptions for each base. Please note that you can assign access levels for each SIG, and also set the defaults for the name of message senders on your system whether Real name or Handles. Make sure that you use copies of the worksheets provided to help you arrange your message bases into SIGS.

Note that this example shows 3 SIGS. The access level of the first SIG is 1000 and it contains 3 message bases. The second SIG is at access 0 and it contains 4 message bases. The third SIG is at level 1000 and it contains 4 message bases. Please note that two of the message bases are also in the first SIG! Turbo 2 allows you to have the same message base in more than one SIG.

If you look at the example, after the message base numbers, you will notice an H or R or both letters. These letters will show Turbo which name type, whether Handles or Real Names are used for that particular message base. H or R only will force the base to be Handles only, or Real Names Only. Using both letters will allow the user to choose which name he prefers to leave as a message sender. The first letter will be the default, ie. HR will be Handles as default, and Real name as an option. RH will be the reverse. Also adding a C on the same line will enable you to save any conference mail (files attached to messages). With this option conference mail will never be deleted in the message base unless it is deleted manually.

SIGS.TXT using NO SIGS Option

```
; All lines beginning with ; are comments
; Format of this file is:
; - NO SIGS Option placed on top line
; - BASE number & handles flag (Default = Real name only ,h = handles only)
;   (hr = both handles and real name, handles default, can be reversed to rh)
; - lines of text ending with '!'
; - another BASE or '!'

NO SIGS
4 c
> Technical Support for Registered Owners
!
7
> Turbo Sysop discussions
!
8
> Worldwide Serious Sysop stuff here
!
1 hr
> Local and Fnet BBS news
!
3 hr
> Adventure Gaming Hints and Questions
!
9
> Atari User's Association
!
10 hr
> Latest ST-Reports found here!!
!
11 hr
> Discussions on the ST, TT, STe, etc
!
13 hr
> Mac Emulator help for Atari users
!
5
> Atari ST C Programmer's Conference
!
12 hr
> Leave your ad here if you want to sell
!
14 h
> Serious Discussions only!
!
15
> NeST  Network
!
16
> Atari Binkley Support Conference
```

```
!
17
> Crossnet Support Conference
!
2
> Future Expansion
!
6
> Future Expansion
!
!
```

If you are starting a new system, refer to your worksheets to help you arrange your message bases.

If you are upgrading from Turbo version 1 or Forem ST, it is a good idea to print out the contents of your old MSGDESC.DAT file if you used one, or merge it into the new SIGS.TXT as this new file contains your base descriptions. Also print out your message base names using the HARDCOPY function (F4) from the Sysop (S)ystem Status command, so you remember what you called your message bases. Note that unlike the older MSGDESC.DAT used in version 1, you can mix up the bases to your liking without having to physically renumber them. The handle flags can still be used, although the Sig Access is not used, since there are no Sigs!

Compiling SIGS.TXT into SIGS.DAT

Once you have finished editing your SIGS.TXT file, it is now time to compile it into SIGS.DAT using Turbo Sysgen, so Turbo Board will be able to read it properly. Once Again start TSYSGEN2.TOS and select option U - SIGS Compiler. If any errors are found, you will be told what line number in SIGS.TXT contains the error, so you can easily find it and correct it. If all is ok, Tsysgen will show you the makeup of your SIGS, using only the SIG numbers and the Message base numbers, note the SIGS start at 0, but when using Turbo Board, they will start at one. Check the message base numbers against your worksheet, to make sure that you have the proper bases in each SIG. If you too many or few message bases defined, Tsysgen will warn you of this fact. If you have defined a message base in more than one SIG, you will probably see a warning. This warning is not fatal, Tsysgen is only letting you know what it found.

Once the SIGS.TXT is compiled, and everything looks ok, you can view the makeup of the SIGS in Tsysgen, without having to boot Turbo Board. Tsysgen will display the SIGS as they are shown in the BBS, but it will add the H R or C flags before the base numbers, to let you know the flags you have set for each base. If your SIG names and Descriptions are ok, check each SIG for the message base names and descriptions. If anything is wrong, merely correct SIGS.TXT and recompile it again with Tsysgen. If all is ok, proceed to the next chapter, Running Turbo Board.

Open a window for the drive with the TURBO2.PRG file by double clicking on the drive icon. If using a default directory then open it also. Now double click on the TURBO2.PRG file.

If you have SET TIME 'ON' in your TURBO.OPT file then you will now see a prompt to enter the current time. Enter the time using the format shown on the screen. Note: this is entered in 24 hour format - no AM or PM is used. A time of 3:15:20 PM would be entered as 15:15:20. If you are not concerned about the seconds you may enter the time as hhmm, where the h is the hours and the m is the minutes. For example 7:30AM could be entered as 0730, 3:15PM as 1515. Next you will be asked to enter the current date. Enter this using the format shown on the screen. Be sure and enter leading 0's. ie., a date of 9 April 1990 would be entered as 04/09/90.

Turbo Board will now create a window at the top of the screen. This is the Status Window of Turbo Board and displays information about the system while it is running. Turbo Board will display:

Turbo Board Status Window

```
Lot:                Turbo Board ST Ver 2.0        Off:        Page On
Name:                          Age: 0  Ph:                                  Ca: 0-0
Dla: 0  Dba: 0  Dd: 0   Du: 0   Dl: 0   Ul: 0   Mai: 0   Fml: 0   Fnt: 0
Fre: 6604123  Mes: 0  MiS: 1295  Ni: 0   No: 21   Si: 0   So: 61  19200 8N1
Fun:                          Fil:
```

Where:

Lot: displays the logon time of the current user.

Off: shows the logoff time of the last user.

Lim: shows the time limit when a user is online, this shown in the spot where the the logoff time is shown in waitring.

"Page On" or "Page Off" will be shown at the far right of the first line, depending on the status of the Chat mode. You will see a an inverse "-Chat-" printed if the user had called the SysOp for chat.

Name:is the current user's name.

Age: is the current user's age.

Ph: will contain the current (or last if no one is on) user's phone number.

Ca: is two numbers. The first number is the total number of Callers since the system was initialized. The second number is the number of Calls since booting.

Dla: stands for Download access, and is the file access level.

Dba: is short for the Database access level.

Except for MiS, No, and So, all data explained below is 'since booting', not since the system was initialized (first created).

Dd: the number of Database file that have been downloaded (read).
Du: the number of Database files that have been uploaded.
Dl: the number of file downloads.
Ul: the number of file uploads.
Mai: is the number of E-Mail messages entered.
Fml: shows the number of Fmail messages entered.
Fnt: is the number of Fnet messages that have been entered on the BBS.

The next line contains:

Fre: the free upload space available on drives allocated to Turbo Board.
Mes: the total number of messages entered.

MiS: the total number of messages currently in the system.
Ni: the number of Fnet messages added to the message bases during the last run of the Fmailer program. (Number in)
No: the number of Fnet messages waiting to be sent. (Number out)
Si: the number of SAFs (Stand-alone Files) that have been received from the FNET mailer.
The far right entry shows the current Communications port (RS-232) settings.
The communications port settings will be displayed in the order:
Baud, Word length, Parity, Stop bits, Translation mode

Translation mode is blank unless the caller is using ATASCII (Atari 8-bit ASCII) mode, in which case it will display AT.

The last data line has two entries:

Fun: is a listing of the latest functions used by the current user.
Fil: is the current disk file in use.

When Turbo Board is finished booting, it will display the current date and time in the center of the screen. This is the "waitring mode". Note: If you have set the TURBO.OPT file for Turbo Board to blank the screen during waitring, as soon as the system is initialized, the screen will go black.

If a modem is connected to the system it should show that the Auto-answer mode is turned OFF. If it is not then make sure your MODEMDAT.TXT file is set up properly. You are now ready for your first logon to the system.

Your First Logon

With the system in the waitring state, press the <RETURN> key to logon locally. The first lines that will flash across your screen show that you are logged on to a Turbo Board ST bulletin board, with the version number and date of last revision shown. Turbo Board will then inform you that you have done a console logon and report the current time.

The disk text file WELCOME.TXT will be displayed at this point. This file normally contains your system logo, ie. system name, hours of operation, etc.

If it exists, the file LOGIN.TXT will also be displayed. This is an optional file that can be used for information a user may need before logging on, or to post any important but time-sensitive information to your users. For example your WELCOME.TXT file normally contains your system logo and is seldom changed. Your LOGIN.TXT file could be used to post notices such as "User group meeting Wednesday, Sept 23rd at 8PM. Everyone be sure and come, and bring a friend! See message base 2 for further information." This file is easily constructed using a word processor, and after 23 Sept it can simply be erased.

Back to your logon...
You will now see the prompt:

Enter ID number or Full Name (0=New User)>

Enter a 0, as you are a new user and need to create a user record for yourself.

The file APPLYPW.TXT will be shown, followed by the prompt:

Please enter your FIRST name:

Enter your full name, or the name Sysop. Sysop is a convenient (though very unimaginative) name to use and can be in your system. Experienced users know every BBS has a SysOp, and will leave try to leave mail to that name. Turbo Board knows this, so the prompt text file can have your real name in it, and all mail to the Sysop will be redirected to your real name.

The system will show you what you entered and ask you to verify that it is correct, as it will do for all the information you are to input.

* Note *

If you have Handles On, you will see the text file that explains Turbo Board's Handle System, and you will be prompted to enter your BBS Handle (Alias) after you have entered your Real Name.

You will next be asked to enter your phone number, after seeing the file GETPHONE.TXT displayed. If you have ADDRESS FILE turned ON in the TURBO.OPT file it will ask for Street address, City, State and Zip code. If GET USER AGE is turned ON in TURBO.OPT it will also ask for your date of birth, from which it will calculate your age.

The next prompt you see will be to enter a password for use on the system. Immediately prior to showing the prompt, the text file PWINFO.TXT was displayed. (You can see this by looking in the Turbo Board status screen at the Fil: section.) Enter a 1 to 12 character password for your use.

Now you need to set your terminal parameters. You will see a mini-menu showing:

(1) Line Feeds ON/OFF	(Now ON)
(2) Computer Type	(Now Atari ST)
(3) Set Term Width	(Now 80)
(4) Toggle Paged Output	(Now ON)
(5) Set Page Length	(Now 23)
(6) Done.	

After each item the current setting is shown.

Line Feeds - Most computers will need Line Feeds on. The exceptions include the Atari 8-bit computers and some Apple computers. If a user sets his/her line feeds to NO without knowing their computer really does need them, every line of text from then on will be written on top of the previous line.

Computer Type - Select the number corresponding to your computer type.

Set Term Width - The possible selections are 40 and 80. You should select 80 columns.

Toggle Paged Output - This setting will toggle the Paging mode. If the paging is turned on, a *More? (Y/N/C) prompt will be shown after the number of lines that are entered in the next entry.

Set Page Length - This setting will determine the number of lines that will scroll before the *More? (Y/N/C) prompt is shown.

When you have set your terminal characteristics type a 6 for Done. If NEW USER SURVEY is on in TURBO.OPT, then you will be shown survey #1 and asked to complete the questions. See the survey command in the main menu section for details on how the surveys work.

You will now be shown the file NEWUSER.TXT. If you have enabled the alternate Save Password, the BBS will then ask you if you wish to save your password for future access. Answer Y and note the ID number Turbo Board gives you. This is the number Turbo Board requested in the initial logon prompt. The system will pause for a few seconds to let you write down your ID number and then continue.

If BULLETINS is ON in TURBO.OPT you will see the System Bulletins at this point. To view a bulletin enter the bulletin number followed by <RETURN>. After viewing a bulletin (or any Database file) the BBS will ask you to enter a selection or Return for menu. Pressing <RETURN> will show you the System Bulletin menu again, pressing Q will exit from the System Bulletins. Press Q now to exit the bulletins.

You should see "No mail waiting", followed by the main Turbo Board menu. In future logons, if you have E-Mail or F-Mail waiting Turbo Board will display (as an example):

You have mail waiting:
    E-Mail: 2
    F-Mail: 0
Use command 'E' to read

If forced Email read was turned on, you would be forced into the Email area on the bbs, to read any Email.

The menu will be covered in the Main Menu section. For now press the F1 function key. This key is used to enter into the SysOp mode in Turbo Board. To see the SysOp menu press <RETURN>. You want to change your user profile from that of a new user to that of SysOp, so type a U followed by <RETURN>. At the PW> prompt, enter 99. This is a pre-established validation mask for SysOp level access. (All this is covered in the SysOp Functions area of the manual.) Now enter an X to exit from the User profile section, and then an X to exit the SysOp mode and return to Turbo Board.

At the main menu prompt (Turbo Board>) enter a G to logoff. If you did not have the alternate Save Password enabled, or you did not save your password the first time, the BBS will ask you if you wish to save your password for future access. Answer Y and note the ID number Turbo Board gives you. This is the number Turbo Board requested in the initial logon prompt. The system will pause for a few seconds to let you write down your ID number and then continue the logoff, advising you of your total connect time and time charged. Having logged off properly your password is now saved and you will have SysOp level access whenever you log back on.

If you want to end the run of Turbo Board you may do so by entering SysOp mode (press either the F1 or F2 function keys) and then entering the command DOS or > at the Sysop> prompt. You may also enter <Control>-<Alternate>-K to 'kill' the bbs from the waitring screen.

The ID number issued by Turbo Board is actually the record number of the user's password, with a 0 as the first digit. As SysOp, your ID number is 00, the next user's ID would be 01, etc. Why use the ID number when you can also use your full name? The reason is speed. If a name is entered Turbo Board must search the password file for a match, if the user ID number is used then Turbo Board can go directly to the record.

You may be wondering why the BBS reported a connect time and a time charged, and what "Time charged" means anyway. The reason there are two times shown is that the time spent in Chat is not 'charged' against a user's call time limits. Also, if you have UPLOAD NOCHARGE turned ON in the TURBO.OPT file then the time spent uploading files is not 'charged' against the user's call time limit. So the connect time is the total time the user was connected to the BBS, and the time charged is the time that is subtracted from the user's time limits.

Chapter 3 - The Main Menu

* Note * This menu setup is the default with Turbo Board, and you will probably change it to your own liking. Read Chapter 7, Customizing Turbo Board, Main Menu Organizer for more information.

Turbo Board Main functions

B - Display Bulletins
D - Data Base (Text file library)
E - Email (Electronic Mail System)
F - File System (up/download)
G - Goodbye (logoff)
H - HELP (enter help system)
J - Junction to Doors (online games
L - Leave mail to Sysop
M - Message base System
S - Survey System
O - Other Bulletin Boards
U - User Utility Sub menu

///Turbo Board Control Codes & Macros (^ = Control Key)

^S - Pause any display
^Q - Resume after pause
^Y - Abort output to main menu
^C - Abort text output to next prompt
^W - Delete a word
^X - Delete to beginning of line
<SPACE>- Yes
<CR> - No
MENU - Main menu from any prompt
OFF - Logoff from any prompt
HELP - Help system at any prompt
TIME - Time remaining at any prompt

B) Reprint the Logon System Bulletins

This will display the System Bulletins contained in the Database section. See Database Area for complete details on how to set up the System Bulletins.

D) Database System

The user will enter the Database sub system where he/she may read text files that the SysOp has placed there. Turbo Board will also allow a privileged user the ability to upload text files to the database system, but the incorporation of those uploaded text files must still be accomplished by the SysOp. The Database section is explained in the Database Area part of the manual.

E) Electronic Mail System (E-Mail)

The E-Mail system is used for sending private messages to another user on the system. The messages may include an 'attached' file, in which case it is F-Mail (Turbo Board File Mail). All F-Mail is received (message read and attached file downloaded) within the E-Mail section. When a user enters the E-Mail section they are notified if there are any E-Mail or F-Mail messages for them with a line such as:

You have 2 piece(s) of mail waiting.

At this point the user has five options: Read, Send, Word wrap toggle, F-Mail send or Quit to the Main menu.

Reading E-Mail

If the Read command is entered and there are messages either to him or from him in the system, the user will be asked which messages he/she wishes to read with the following prompt:

Read mail (F)rom you (T)o you (B)oth:

The messages satisfying the read parameter input by the user will then be displayed in forward order of date sent.

If the user has been granted privilege 6, RMAIL_P, then he will see:

Read mail (A)ll (U)ser (F)rom you (T)o you (B)oth:

Where All will show all E-Mail messages in the system and the User option will allow the user to read all the mail to and/or from a particular user.

At the end of each message read the user is given a selection of options. He may:

(@)gain - Reread the message
(A)nswer - Answer the message
(H)old - Hold after command (usage: Command/H)
(N)ext - Read the next message
(Q)uit - Quit to the E-mail menu

Additionally, if the user has the required privileges granted to him by the SysOp he may:

C - Copy message. The message may be copied to one of the regular message bases as a locked message. (Privilege 22, CPMSG_P)
E - Edit and resave the message if it was "From" him/her. The message editor will be entered and errors may be corrected or changes made to the message. (Privilege 18, EDOMSG_P)
L - Log print. Will print the current message to the system log. (Printer or TURBO.LOG, depending on the LOG TO DISK setting.) Controlled by privilege 4, PRINT_P
S - Save message. The message will not be automatically deleted at the specified E-Mail deletion time. (Privilege 20, MAISAV_P; see EMAIL DELETE in the TURBO.OPT section)
$ - Save as an Fnet message (See Fmailer Docs) This ability is controlled by privilege 26, NET_SAVE_P)

With additional privileges, normally reserved for the SysOp and co-SysOps, the following commands are available:

D - Delete message (Privilege 15, DELM_P)
E - Edit the message, even if not from the current user. (Privilege 16, EDMESS_P)
P - Print message on the system printer. (Privilege 4, PRINT_P)
F - Display who an anonymous message was from. (Privilege 7, FANON_P)
T - Display who the message was To if it was a reply to an anonymous message. (Privilege 8, TANON_P)

Sending E-Mail

If a user selects S at the E-Mail menu, then the system will first check to see if there is room for a new message. Remember, E-Mail messages are saved until read or deleted by the SysOp and will not be deleted automatically to make room for new messages. If there is no room the user is informed of this and is requested to try again at a later date.If there is room, the user is shown the prompt:

To (?=Help):

If the ? is entered for help, the following will be displayed:

Enter addressee's name or

List = Send messages to 1-50 users
Search = Search for user name spelling
Fnet = Send Fnet message to remote BBS
Fido = Send Fidonet compatible message (not yet implemented)
<Return> = Address message to 'ALL'

Note: You cannot send E-Mail to ALL, so if the user presses <Return> with no input, the system will default to the Search routine. In the message bases this function works properly.

If LIST is typed, the system will ask for the name to send the message to, and repeat asking for the name to send to until 50 users have been selected or the user enters a bare <Return> to end the input of names. At the LIST prompt a SysOp may also type the word FILE and then the system will prompt with:

Enter Filename:

At which point you could enter the name of a text file that contains the names of up to 50 people that you wish to send the message to. All of these names must be present in your system and spelled exactly as they are spelt on your system. One person's name on each line is the proper format.

If Search is typed (or a bare <Return>) the system will show the text file MSEA.TXT and then show:

Enter search name:

The search is accomplished using whatever string is input by the user. For example, if searching for a user named John Smith, then the user could enter John, or Joh, or John S, etc. Any match on the string entered with a user name will be shown. On each match the system will ask if the user wants to send the message to this user, continue the search, or abort. If the user wishes to stop at every user on the system they may enter ALL as the search string.

The Fnet option is covered in the FMAILER.DOC file in the FMAILER.LZH file.

If the user enters the name to send to directly, then the system will search the password list to insure there is a user with that name. The system will not accept

an E-Mail message to a user whose name does not exist in the password system.

Once a name has been entered and verified the BBS will ask for the subject of the message. If no subject is entered the message is aborted and the send E-Mail command is exited.

Once an addressee has been selected the user will be notified of how many messages are waiting to be read by the addressee.

If the user has the send anonymous messages privilege (Privilege 3, ANON_P) they will be asked for a Yes/No answer on whether they wish to send the message anonymously.

The user will then enter the message editor where they may create a message containing a maximum of 20 lines by 76 characters. The editor mini help screen will be shown (MHELP.TXT) when they enter the editor to assist them. (See the message base section for full details on the editor.)

F) Files System (upload/download)

Because of the extensive nature of the file system it is discussed in its own section of the manual. See the chapter on File Area.

G) Goodbye/Logoff

The user is first asked to verify the logoff. If they are a new user they are asked if they would like to have their user ID number saved for future use. If the user answers yes, then their logon information is sent to the system log and the system checks to see if there is space to save the record in the password file.

If there is insufficient room in the password file the user will be informed that the system is full and that the SysOp has been notified of his request for permanent access. If the file has room for the user then they will be issued a seven digit ID number to be used for future logons.

The user is then given a thank you for calling message, his logon and logoff times, connect time and time charged and then logged off.

H) Help System

Invokes the Turbo Board Help utility. This may also be entered by typing Help on any line outside of the message editor. (Note: entering a message subject of Help will also cause the system to enter the help utility.)

Help will return a list of available topics as set up by the MAKEIDX.TOS program. The user may enter a topic name or a 'bare' <Return> in order to exit the help system. A topic may have subtopics, in which case once the main topic has been described a list of available subtopics will be shown.

When moving around in the help system it is important that the topic and subtopic names be entered exactly as shown. For example, if one of the topics was Sysop_mode, then the name would have to be entered with the '_' character as shown.

When a user has entered a command to see help on, such as Sysop_mode, he has moved one level down into the help system. If that topic has subtopics, he may move further into the system. To move back up one level the user should enter a 'bare' <Return>. A "?" entered will display the last help screen.

See the appendix on Editing the Help files, for information on how to properly edit and rebuild the HELP.IDX file.

J) Jump to Subprogram (Doors)

To keep compatibility with older versions of Turbo Board and with Forem ST, we have included the DOORS function. Please see Chapter 9, Forem ST compatible functions for more information on Doors.

L) Leave Message to System Operator

This command allows a user to easily send a message to the SysOp. First the user will be asked for the subject of the message, with the default subject, shown in <>'s, being Message to Sysop. After entering a new subject or pressing <Return> to keep the default subject, the user will enter the Turbo Board message editor where they may leave a standard sized message to the SysOp. If SYSOP EMAIL is ON in the TURBO.OPT file the message will be saved as E-Mail addressed to the name contained on the sixth line of the PROMPT.TXT file. (See Chapter 7, Customizing Turbo Board) If off, it will be printed on the system log.

M) Message System

The user will enter the Turbo Board message base section if an M is entered at the main menu. The message base section is fully described in the Messages chapter of the manual.

S) Surveys

This command capability allows the SysOp to conduct user surveys. Up to 99 surveys may exist at any one time. Upon entering the survey system the user will be shown a list of surveys to select from. If a survey is selected he will then be

asked to answer the questions for that survey set up by the SysOp. Optionally, survey one may be automatically invoked at login for a new user, following his password application. This capability is enabled by turning NEW USER SURVEY on in the TURBO.OPT file.

In order to create a survey you must create the following files which will reside in either your system default directory or the optional survey subdirectory.

SURVEY.LST. This file contains a listing of the titles of your surveys. The format is:

```
Number of surveys
Title of survey 1
!
Title of survey 2
!
      .
      .
      .
!
```

An example of a SURVEY.LST file with explanations in parenthesis (do not include the explanations in your files) is:

```
2                          (Number of surveys)
Survey 1                       (Start of title for survey #1)
New user information
!                          (Survey title delimiter)
Survey 2 - Computer equipment     (Title for survey #2)
!
```

You will notice that survey one's title is on two lines. This is possible because the "!" acts as a delimiter between the survey titles, allowing you to have multi-line titles/descriptions for your surveys.

For each survey a question file must be created. Its file name must be in the format SURVEYx.TXT, where the x is the number of the survey (1-99). The format for the file itself is:

```
Number of questions
Q enable flag
Question 1
!
Blank line enable flag
Question 2
!
Blank line enable flag
Question 3
      .
      .
      .
!
```

blank line enable flag

The Q enable flag is an integer of 0 or 1, which tells Turbo Board if the user is allowed to exit the survey before it is completed. If the Q enable line contains a 1 then the user may enter a Q as his answer to any question and the survey will be aborted. Again, the exclamation mark between questions is required and is to allow multi-line questions.

The blank line enable flag is also an integer value of 0 or 1. This instructs Turbo Board on what to do if the user does not answer the question, but just presses <Return>. (A bare <return> entered.) If the blank line enable flag is a 0 then the survey will not allow a blank line answer, but will continue to ask for a response to the question until a non-blank answer is provided. The blank line enable flag is required for each question in the survey.

An example SURVEYx.TXT file with explanations in parenthesis (do NOT include the explanations in your file) is:

2 (number of questions)
0 (Q enable flag, 0 means the survey may be quit)
Question 1: What is your REAL name?
! (question delimiter)
0 (blank line enable flag, 0 = not allow a blank answer) Question 2: Did you answer question 1 truthfully?
!
1 (blank line enable flag, 1 = allow a blank answer)

You may also have two optional files to be displayed before and after a survey. These must be named in the format SURVEYx.ENT and SURVEYx.EXI, where the x is the number of the survey. SURVEYx.ENT will be shown when entering the survey, SURVEYx.EXI shown when exiting the survey.

The answers to the surveys are logged in a file with the format SURVEYx.ANS, where the x is the number of the survey.

Note: Make sure there are no leading blank lines in any survey file.

SURVEY.BAT option

Now if you don't want to use the Survey System, as we incorporated the old Forem ST style, you may alternately use your own SURVEY program, and can run it from the SURVEY.BAT file. See the appendix on BATCH FILE PROGRAMMING for more information.

X) Transfer file with F-Mail

F-Mail is a method for a user to send a file to 1 to 50 other users. In addition, F-Mail may be sent over the Fnet to a user on another BBSs. F-Mail may also be sent from the E-Mail section. When a user enters the X command at the main menu prompt (not shown on our bbs), or enters F at the first E-Mail sub-menu,

Turbo Board will display the text file FMAIL.TXT and then ask the user to:

Enter F-Mail filename:

After entering a filename, Turbo Board will check to insure an F-Mail file of the same name is not already waiting to be sent. If it is the user will be informed that the filename is in use and asked to re-enter a new name. After a valid filename has been entered Turbo Board will ask the user to select the file transfer protocol desired. (See the Files section for a discussion of the available file transfer protocols.)

Once the file has been received the user will be entered into the E-Mail section and asked to address the F-Mail and enter an E-Mail type message to the addressee. The F-Mail message is saved in the E-Mail message base, and is identical to the standard E-Mail message. The Attached file will be saved in the FMAIL folder on the drive with the most free space.

When the addressee logs on they will be advised that they have F-Mail. To receive their F-Mail they must enter the E-Mail section and read the F-Mail message. After displaying the F-Mail message Turbo Board will indicate that there is F-Mail attached, to use the X command to download, and if not downloaded the file will be erased after (x) days. The time (in days) allowed for a user to read and download the F-Mail file is set in the TURBO.OPT file, on the FMAIL DELETE line.

The X command referred to by Turbo Board is to be entered at that point, not at the main menu. If the user enters a question mark to see the command choices available after reading his F-Mail message the X command will be displayed.

After entering an X to receive his F-Mail file, the user will be shown the filename and size and asked to select a download protocol.

If the user does not download his F-Mail, then Turbo Board will not erase his F-Mail file or message and the next time he/she logs on they will again be advised that they have F-Mail waiting. Once the file has been downloaded, or if the user does not download the file in the allotted number of days, Turbo Board will erase the file from the FMAIL folder.

Note: To send F-Mail to more than one user enter the word List at the To: prompt. F-Mail, just as E-Mail, may be sent to from 1 to 50 users this way. For the Sysop, the FILE option for LIST may also be utilized.

User Utility Submenu

When you enter U from the Main menu, you will see this Submenu:

///Turbo Board Utilities

A- Add a BBS number to list
C- Chat mode (page Sysop)
D- Toggle connect time display
G- Set graphics menu style
H- Change BBS Handle
M- Available Macro Commands
Q- Quit to main menu
N- Make a NEW password
P- View your profile
R- Ring back (valid users)
S- Set 'clear screen' mode
T- Set terminal type/line feeds
U- User log (search list of users)

Utilities>

A) Add to Other BBS List

When the A command is used Turbo Board will ask for the name, phone number, maximum baud rate, storage capacity, state where located and system type of the BBS to be added to the list. The data will then be appended to the current BBS list. The BBS information and the fact that it was added to the list will be logged to the system log.

C) Chat mode/Call for System Operator

If the chat mode is enabled then the SysOp will be paged by the console bell and the printer bell (if the printer is online.) The user will be notified that the SysOp has been paged and that he will come online for 'chatting' if he is available. Whenever a user requests a chat, even if chat mode is off, the word -Chat- in inverse video will be displayed on the upper right corner of the Turbo Board status screen.

If you wish to 'chat' with the user, you may press either the F1 or F2 keys to gain access to the SysOp commands and then enter command C to 'chat'. If the F1 key is pressed the user will shown the third line of the file PROMPT.TXT. If the F2 key is pressed no indication will be presented to the user that you have taken control. While in the SysOp mode the user is 'locked out' and will receive no response from the BBS until you either enter chat mode or exit the SysOp mode.

Alternately you may hit the <Esc> key to directly enter the Chat mode without having to first enter the sysop mode. First make sure that you have the Snoop mode on (you can see what the user is typing) before you enter chat.

You may use an alternate Chat program if you wish. Just place CHAT.PRG in your main bbs directory (where TURBO.OPT resides) and it will be loaded and used instead of the regular chat mode. CHAT.PRG may be any chat program you can find.

To exit chat mode press the ESC key, then exit SysOp mode by using the X or Q command. When you exit SysOp mode the BBS will advise the user that control has been returned to him/her.

D) Connect time toggle

If on, the connect time will be shown when the user is at the main menu prompt. (Usr function 1, TIME ON in SysOp mode.)

G) Set Graphics Menu Style

If you want to have a few hours of work, you may set up alternate graphics menus on your ST, for VT 52, ANSI, VIDTEX, etc. Hitting G at this prompt will show you a submenu of Available Graphics menus (GRAPHICS.TXT) This command will only work if Graphics have been enabled in TURBO.OPT and you have alternate menus set up. See Chapter 7, Customizing Turbo Board, for more details.

H) Change Handle

If the handle system has been enabled in TURBO.OPT, and the user has been given the Handle privilege, he may change his BBS handle using this command.

M) Available Macros

You as the Sysop may create a special data file called MACROS.DAT that can contain macros that will help people move around the board much easier. See Chapter 7, Customizing Turbo Board, for more information on macro files. If a user selects this option, he will be shown a list of the available macros that are at his access level or below.

N) Create NEW Password

The user will first be asked to verify his old password by entering it again. If entered correctly he will be asked for a new 1-12 character password. The new password will take effect on the users next call.

O) Other BBS Listing

A list of BBSs, added to by the A command at the main menu, is obtainable by using the O command. When O is selected the user will be shown:

Search by:

(0)-All
(1)-State
(2)-Area Code
(3)-Name
(4)-Baud
(5)-System type:

If anything other than 0 is selected then the user will be asked to input the search string. The baud shown in the list is the maximum baud rate of the BBS. So if the user searches for 9600 baud BBSs, he will be shown only the BBSs with a maximum baud rate of 9600 and would have to repeat his search if he was also interested in 2400 and 1200 baud systems.

The information shown following a search is:

ST	Name	Phone	Baud	Storage	Software
ON	Turbo Board SUPPORT	416-274-1225	9600	320 MB	Turbo Board

P) User Profile

The user will be shown his current account status. This is the same information as shown in the SysOp mode when looking at a user record. (See SysOp functions for details.)

R) Ringback Command

You may set your BBS to call the current user back. This is used for security measures or to save the caller long distance charges. When the R command is used Turbo Board will display a message stating that ringback was requested and then hang up the user. Turbo Board will pause thirty seconds to allow the user time to set his modem to auto answer. The status of the user's CALL BACK CODE usr function is checked before calling back. (See Sysop Commands for an explanation of the usr functions.) If YES, Turbo Board will use the string on the line titled RINGBACK DIALING COMMAND (LONG DISTANCE) in TURBO.OPT to prefix the user's phone number in the command sent to the modem. If NO, Turbo Board will use the previous line in TURBO.OPT, titled RINGBACK DIALING COMMAND (LOCAL CALL). After the 30 second pause Turbo Board will attempt to call the user using the appropriate dialing commands and the user's phone number.

S) Clear Screen Toggle

This command will toggle the user's clear screen setting. If on the screen will be cleared for each new menu or message shown. To change the setting simply select S. (Usr function 3, CLR SCREEN in SysOp mode.)

T) Set Terminal Type / Line Feeds

The user will be shown the same mini-menu as a new user is shown for selecting his terminal type, line feed setting, screen width and length, and Paging Mode. (See Your First Logon for details.)

U) Display User Log

The user will be asked whether to display all users or only users on since a specified date. If a date is entered all users whose last logon date is equal to or greater than the date entered will be displayed. If a date is entered it must be in the form mm-dd-yy, with dashes separating the elements. The / may not be used as Turbo Board interprets that as a delimiter for stacking commands. (See command stacking.) If a bare <Return> is used the command will be aborted.

Global Commands and Command Stacking

The Following System Macros are available:

(They are shown in Capitals, but are not Case Sensitive)

HELP will bring you into the help system from any prompt in the BBS.

MENU will return you to the main menu prompt from any submenu prompt in Turbo Board. This is handy if you want to back out of a function quickly.

OFF from any menu prompt will automatically log you off the system. If the Greeting Messages are enabled, you will not be able to leave a greeting message if you log off in this manner.

TIME will display the date, time, and your connect time as well as the amount of time you have left.

STOP will stop the execution of a macro or a stacked command, if you have paused at any prompt. (ie Read All new Messages)

Control Keys

Holding down the <Control> key and pressing C will abort the output of any text screen, data base file, message, or ascii download. Please note that many Sysops will make the menu or other text files non- ^C -able, so it will not work under all conditions.

The <Control> S command will Pause any display from the bbs. Hold down the <Control> key and press S for a ^S.

The <Control> Q command will restart any paused display. Hold down the <Control> key and press Q for a ^Q.

The <Control> W command will allow you to delete a word on either at a command prompt or in the message editor. The word to the left of the cursor will be the one deleted, and this command may be repeated until all the words in the line, or at the prompt are deleted.

The <Control> X command will delete any waiting input on a line in the message editor, or a command at the command prompt.

The <Control> Y command, performed by holding the Control key down while pressing Y, is used to abort to the main menu prompt. This command will only work though if used during text output by the BBS. If you wish to abort to the main menu at other times (when the system is waiting for a command), enter the word "MENU".

Command Stacking

Most system entries that are not yes/no type answers or message prompt responses may be 'stacked'. This means a user may enter a series of commands on a single line, speeding up the process he wishes to accomplish. When command stacking is used, all the text information Turbo Board normally displays after a command is not shown.

To stack commands the / character is used to separate each individual command on the line. For example the following string entered at the main menu prompt will read all the new messages in message base 1, and then return the user to the main menu. Note: this will only work if continuous scroll of messages has been previously selected.

Turbo Board> M/1/R/N/Q/Q

Turbo Board Message System

Turbo Board can support up to 64 separate message bases. These bases can be grouped in categorize called SIGS (Special Interest Groups) and there may be up to 16 SIGS in the Message system. Access to the SIGS are controlled by the Sysop, and you may not be able to access all of them. The ones you don't have access to, will not be shown to you. Access to each message base within the SIGS for both reading messages and entering of messages is individually controlled by the SysOp for each user. E-mail is an individual message base that is not counted in the 64 message base total.

Accessing the Message System

To access the message bases enter the M command at the main prompt. You will then be shown a list of the message SIGS you have read access to.

///Turbo Board Support Message SIG Selection

'*' = Contains messages new to you '-'=Sig OFF

```
 *  1) General        Wide Variety of Message Bases
 *  2) Sports         The Sports SIG
 *- 3) Programmers    The Programmer's SIG


(A)ll  (C)lear  (F)lagged  (R)everse  (T)oggle  (Q)uit  ?=Help

Select SIG>
```

At this point you are not yet in any SIG, but you have a variety of functions available to you, and these are as follows:

(A)ll - Allows you to read all new messages in all SIGS that you have turned ON

(C)lear - Allows you to Clear all new messages, and set your High message read counters to the highest message in each message base.

(F)lagged - Will search all SIGS turned on for messages flagged to you.

(R)everse - Reverse, will allow you to reverse read each message base in each SIG that you have turned ON, and contains new messages.

(T)oggle - Toggle allows you to turn each SIG on or off, so it will not be in a Read All or Reverse Read macro. (you will skip it)

(H)elp - Will display a short help file outlining these options

(Q)uit - Quit to main menu

At this point you are not 'in' a message SIG yet. As you can see, Turbo Board will alert you to which message SIGS have new messages that you have not read yet. Turbo Board keeps track of the highest message number you have read in each message base. You will also be shown which message SIGS are turned off.

Enter the number of the message SIG you wish to gain access to in order to enter the message base or you can enter the letter of the read option. To exit the message SIG selection menu without entering a message base you must enter a bare <Return> or by typing Q. If you are following along on your BBS, type a 1 to enter message base 1.

Switching to General

'*' = Contains messages new to you '-'=Sig OFF

General

1) General	BBS news, and general messages
2) Games	Games base
3) ST-Report	ST-Report Conference

(A)ll (C)lear (F)lagged (R)everse (S)igs (T)oggle (Q)uit ?=Help

Select Base>

The options are all the same as they were at the SIG menu, except now they only work on the Messages bases themselves within the SIG you have selected.

There is one additional option called (S)igs. This option will allow you to return to the SIG Selection Menu, if you use (Q)uit, you will exit back to the main menu.

Now select base 1 by typing 1.

You will now see something like (depending on the name of your message base 1 and the number of messages in the base):

Switching to General

(A text file can be optionally displayed here)

///Turbo Board Support Message System

Current Message Base : General

Total messages in base : 200
High message # received : 22360
Last message # in base : 22380
Number of new messages : 20

Continuous scroll off, Handles on

Msg Cmd (?=Menu):

The first 5 lines give you the base message statistics, the important one being the number of new messages.

"Continuous scroll off" means the system will stop after showing each message to you. Turning continuous scroll on and off will be covered below.

"Handles on" means that the System will allow you to leave a message using your BBS Handle instead of your real name. Depending on how the Sysop has set up the message base, you may be able to enter Messages using "Real names only", or using "Handles only". These would be displayed instead if this were the case.

If a question mark is entered at the Msg Cmd prompt, or simply a bare <return> (defaults to the ? command) you will see:

(A) = Check for All messages to or from you
(B) = Check for Messages Addressed from you
(C) = Check for Messages Addressed to you
(D) = Delete Message
(E) = Enter Message
(F) = Read Flagged Messages
(G) = Flag All Conf F-Mail Messages
(H) = Toggle Message Editor Initial Command Summary ON/OFF
(L) = Locate and Read (search) Messages
(M) = Read Marked Messages
(O) = Other Message bases
(R) = Read Messages
(S) = Scan/Mark Messages
(W) = Message editor Word Wrap toggle
(@) = Toggle continuous scroll on/off
(#) = Set continuous messages scroll delay
(Q) = Quit to Main menu

Msg Cmd (?=Menu):

Reading Messages

Reading messages will be covered first, as many of the other commands are extensions of the read command or alter it in some way. If you are just starting the BBS and there are no messages currently in the message base skip to Entering Messages.

To read messages use the R command. Turbo Board will show you:

Read/Scan Messages - General

This message base has 200 messages

The first message is # 22136
The last message is # 22380

Read Cmd (?=List):

Notice that the current prompt, Read Cmd, is different than the previous prompt, Msg Cmd. This prompt has it's own set of options for choosing which messages to read. To see the choices enter a question mark or a bare <Return>. You will see:

100;105;103	List
2-15	Range
+ or F	Forward read
- or R	Reverse read
N	New messages
Q	Quit

First, to list individual messages enter the message numbers separated by semicolons. This list does not have to be in ascending order as you can see from the example. If you want to read a block of messages you may enter a range as shown. Note you may also show the range in descending order, such as 15-2, and Turbo Board will show them starting at message #15 and working backwards to #2. To read all the messages in ascending order, enter a + or F. Similarly, to read all the messages in descending order enter a - or R. To read all the new messages in ascending order, enter an N. To exit the Read Cmd enter a Q.

Once a valid Read Msg command has been entered the first message selected will be shown. If continuous scroll is on, all the messages chosen will be shown.

At the end of the message you will see:

Read Msg Cmd (?=List):

Again, this is a new set of commands, not to be confused with the Read Cmd or Msg Cmd prompts. The options shown will depend on the user's privileges. A standard user with the ability to enter messages will see:

(@)gain
(A)nswer
(B)ack
(H)old after command
(N)ext
(Q)uit

The @ (again) command will re-display the message. Answer will take you into the message editor for entering a message and will be covered in the Entering messages section. Back will show the previous message if there is one in the current Read message set of messages. Hold will allow you to perform a function and then be back at the Read Msg Cmd for THIS message again, to read the message again you will need to use the @ command.

For example: if you wanted to Answer the message but remain at the current message in case you wanted to re-display it or enter another reply, you could enter A/H to answer but remain at the current message. Next will display the next message in the read message set of messages. Quit will exit the reading of messages in this message base.

If the message you are reading is a reply to a message, then you will be shown an additional command; (M)essage this is a reply to. This allows you to jump back the message reply chain, even if the message you are jumping to is out of your current read 'set' of messages.

If the message has replies then the message numbers for the replies will be shown at the end of the message, such as:

Replies: 99 103

Which means this message has two replies, message numbers 99 and 103. You will also see (R)eplies as a choice at the Read Msg Cmd prompt. This allows you to read all the replies to the message that have been entered; in this case it would show you messages #99 and #103. Once the replies have been read the messages shown will pick up from the next message in your read command set. If you wished to read the replies and then remain at the current message, perhaps to enter another reply to the message if the current replies did not answer the message fully, you would enter R/H. After reading the last reply you would see a repeat of the Read Msg Cmd prompt. At this point you are back at the original message. To see it again type the @ command. To reply to the message enter an A.

If the message is an anonymous message (the From field shows Anonymous instead of the user's name) and the current user has the privilege to find out who the sender was, there will also be the command shown of (F)rom anonymous user name. This command will display the name of the sender of the anonymous message. To remain at the current message Read Msg Cmd prompt after finding out the sender, type F/H.

If the message is a reply to an anonymous message and you wish to find out who it is addressed to use the (T)o anonymous user name command. Note, you must have the required privilege to use this function, or see the command at all.

If the message is from you and you have the privilege to edit your own messages, or you have the ability to edit all messages, you will also see the command (E)dit listed in the Read Msg Cmd list.

There are additional options that are normally reserved for the SysOp's use. These are:

(C)opy to another message base
(D)elete
(I)nvert Message Lock
(L)og/File print
(P)rint on printer
($)ave as F-NET Message

The Copy message command allows the current message to be copied over to another message base. Note: The message will not be deleted on the current message base when copied. To copy and delete stack your commands as C/D.

Delete message will do just that. The ability to delete any message is normally reserved for SysOps. If a message is from the current user then they will also see the Delete option as a valid choice.

Log to print will log the current message to the system log, either the printer if active or the disk log. Print on printer will print the message no matter what the current status of the log is. You can also save the message to a File, and will be prompted as for the filename you wish to use.

The $ command will allow you to redirect the current message as an Fnet message.

Messages themselves are shown in the following format:

Message header consisting of:

Conf : General
Msg# : 22368 Lines: 16 Read: 2
Sent : June 16, 1991 at 9:39 AM
To : Ralph Mariano at Fnet Node 350
From : John Miller
Subj : ST Report

Message body.

Replies: (If there are any)

If the first line of the message header says Locked Message, then that message is only readable by the addressee, the sender, and those with the privilege to read any locked message.

Conf: is the name of the Message base you are currently in.

Lines: is the number of lines in the message. If the message is an extended message (over 20 lines long), the word EXTENDED will appear here. This occurs because extended messages are saved as files and Turbo Board does not necessarily know how many lines are in the file.

Read: is how many times the message has been read.

The Sent line is filled as Sent: Jun 16, 1991 at 9:39 AM

If the message is addressed to a name other than All, then when it has been received by the addressee there will be an additional line in the header between Sent and To of Rcvd and the date (only) the message was read by the recipient.

Entering Messages

There are two ways to enter a message in Turbo Board. You may use the E command at the Msg Cmd prompt, or the A (for Answer) option at the Read Msg Cmd prompt. If you use the E option at the Msg Cmd prompt you will be asked first for the addressee of the message with the following prompt:

Attach File?

If you answer yes to this question, you will have to upload a file to be attached to the message, similarly to F-Mail, but this message will be public to all who read it. Just hit <Return> and you will see:

To: (?=Help)

Entering a question mark will display:

Enter addressee's name or

List = Send message to 1-50 users
Search = Search for user name spelling
<Return> = Address message to 'ALL'

Note: List is only valid when entering an E-Mail or F-Mail message.

If Search is now entered you will be shown an explanation of how to use the search function. The search function requests a name, or part of a name, and will show all users that have the target string in their name.
The user will be asked to:

Enter search name:

Turbo Board will search the password files and look for any matches of the string entered with the user names in the password file. For example if the user was not sure of the spelling of BILL MILLER, but wished to send him a message, they could enter BILL and have the BBS search for users with the string "BILL" anywhere in the name. When it finds a match it will display:

BILL MILLER Last on: Jun 14, 1991 (0=Continue 1=Send 2=Abort):

Entering a 0 will continue the search, a 1 will automatically address the message to that user, and a 2 will abort the search, returning you to the To:

(?=Help) prompt.

If a bare <Return> is entered it will cause Turbo Board to substitute a 0, continue, as the command. Note: This search for the string BILL would also stop at a name of JOE BILLIE. The target string need not be the first part of the user's name.

Privileged users may see additional commands available. These are:

Fnet : Send F-Net message to a remote BBS
Sysusr:X : Send message to level X users
Fido : Send Fido Netmail compatible Netmail

To send an Fnet message the user must have the privilege.

If you enter a bare <Return> at the To: (?=Help) prompt, the message will be addressed to ALL. You may also enter the word ALL as the addressee, but it is easiest to just press <Return>.

If the message is entered as an Answer to a message at the Read Msg Cmd prompt, then the addressee will be set automatically to the sender of the message this is a reply to.

Next the BBS will ask for the subject of the message. If the message is a reply, then the subject of the message this is replying to will be displayed in <>'s. To keep the old subject simply press <Return>. If entering a new message (not a reply), or to change the subject on a reply message, just type in the subject (up to 76 characters) for the message. If entering a new message from the Msg Cmd prompt and a bare <Return> is entered, the system will abort the message send.

If the message is addressed to anyone other than ALL, Turbo Board will ask if you want the message to be read only by the addressee. If you answer yes then the message will be a locked message, and only you, the addressee, and users with special privileges will be able to read the message. Turbo Board will not check to see if there really is a user with the addressee's name in the user log for messages sent 'locked', so if you enter as the addressee "All 520ST users", it will still ask you if it is to be read only by "ALL 520ST USERS".

If the user has the privilege to send messages anonymously the system will ask if the message is to be saved anonymously. If answered with a Y the From field will show the word ANONYMOUS instead of the author's name. Users with the FANON_P privilege will still be able to obtain the name of the sender using the F command when reading the message.

Note: There is an additional address which may be used: SYSUSR:x. This is generally a SysOp privilege. If you have the privilege and addresses the message to SYSUSR:x, where x is a number between 1 and 32767, then the message will be flagged as addressed to all users with a download (file) access level of x or higher. If the message is sent as a locked message, readable only by the addressee, then only users with a download level of x or higher will be able to read the message.

Next you will be asked how you want to enter the message:
(A) Message editor, (B) Upload message, (C) Copy File or (D) BBS Remacs:

If a bare <Return> is entered at this prompt the system will default to the Turbo Board Editor.

An uploaded message's body is also saved as a file, similar to an extended message, but can be any length since the Turbo Board editor is not used to enter the message. Uploaded and extended messages may be edited after uploading as can be done with standard messages.

The Copy file command is used to take a text file already on the system drives and add it as a message. This privilege is normally reserved for SysOps.

The (D) will only show if the R_Emacs program can be found on the BBS. It is a version of Emacs that has been modified to work with Turbo Board.

The Message Editor

The last printed line immediately before stopping to let you enter your message will display the status of the word wrap and line numbers. If line numbers are on you will see 1) on the line for you to begin entering your message. If word wrap is on you continue typing as in a word processor, not pressing <Return> unless you want to force a new line at that point. If word wrap is off the editor will not move to a new line until you press <Return>.

Quick Command Prompt

If the Quick Command Prompt is enabled in the message editor, you can call up this prompt by hitting (Return) two consecutive times on a blank line.

It will show you a quick summary of the most used message commands:

(S)ave (A)bort (L)ist (G)oto (H)elp >

You may either use the 5 command letters shown, or use the / editor commands at this prompt.

/ Message Editor Commands:

/A - Abort
/S - Save
/J - Center Justify preceding line
/T - Goto top of message
/B - Goto bottom of message
/Nnn- Next nn lines
/Dnn- Delete next nn lines
/Lnn - List next nn lines
/P - Toggle Quick Command Prompt
/# - Toggle line number mode
/W - Toggle word wrap on/off
/MT - Change Message To
/MS - Change Message Subject

/C/text1/text2 - change first occurrence of text1 with text2
/I/text - insert line text above the current line

Turbo Board uses a line editor. This means you may only edit the line you are currently on. To move around in the message you use the commands /G /T /B or /N. /G is the Goto command, and you must enter a line number after the G to goto, as in /G2 to go to line 2. /N operates the same as the /G command. /T will move you to the top of the message (line 1), and /B will move you to the bottom of the message.

Type the Change command, /C, another backslash (/), followed by the word as spelled on the line, a third /, then the correct spelling.

Example: to changed the word speled to spelled, you would use:

/c/speled/spelled

Now press <Return>. You should see the line retyped with the word corrected.

If Turbo Board says it could not find the word you asked it to change, check your spelling and/or format of the command again. An important point to remember with the change command is that it replaces the first occurrence of the string requested with the second string. You need to make sure your first string is sufficiently unique so the correct string is replaced. The Search is not Case Sensitive, but the replaced text will be in the Case that you have entered it.

For example, if your line of text was: This is speled correctly.

You would enter /C/speled/spelled and then it would be corrected.

To see how the list command works type /L on a new line. The entire message is displayed and you are returned to the line you were on when the /L command was issued. If you enter a number following the /L, then only that many lines will be displayed.

To delete a line or group of lines use the /D command. If no number is used with the command it will delete one line, the line you are currently on. If the command is used with an optional number, as in /D5, it will delete that number of lines from your message, starting on the line you are currently on. You may also center justify the preceding line of text using the /J command.

To insert a line in between two previously entered lines, use the /I command. To use the insert command type /I/new line, where "new line" is your new line of text. This line will be inserted above the line you are presently on. The /# command will toggle your line numbers on and off. /W will toggle word wrap on and off. To abort a message use the /A command. If you enter /A, the BBS will prompt you with "Abort?" to verify you really want to abort the message without saving.

/P this will toggle off and on the Quick Command prompt discussed earlier.

The last general message editing command is the /S for save command. When you are finished entering your message enter /S on any line or at the Msg Edit> prompt.

There are two additional editor commands privileged users may use. They are the commands to change the message subject and who the message is addressed to.
The /MS command will change the message subject.
The /MT command will change to whom the message is addressed.

Message Commands

A B C - Check For Messages

The easiest searches to accomplish use the A, B and C commands at the Msg Cmd prompt. These are used to search for messages addressed to you, messages addressed from you, or both. If one of these is chosen the message base will be rapidly scanned and any messages matching your search parameter will be displayed as Read message #xxx.

Note: These commands only search for and flag the messages, they do not show them to you. To read the messages use the F command - Read Flagged Messages.

D - Delete Message

A user may use the D (Delete) command to erase messages on the system. When the D command is used Turbo Board will ask for the message number of the message to be deleted. If the message was entered by the user or they have the delete any message privilege the message will be deleted.

G - Flag Confmail

You may also flag all Conference Fmail in a message base using this command.

L - Locate

The (L)ocate command enables the user to search messages for a specified string in the message body, from, to or subject fields. It also allows you to search for messages from a specific Fnet node. The search on the Fnet node may use either the node number or BBS name.

When an L is entered the user will see the following prompt:

Select search field
- (A) - To
- (B) - From
- (C) - Subj
- (D) - Message text
- (E) - Node
- (F) - Date
- (G) - Conf Mail

The search field parameters may be combined to enable a search on multiple fields. To combine search fields just enter the appropriate letter associated with the fields you wish to search. For example, to search for the string "Atari ST" in either the Subject or Message text you would enter CD. After making a selection the BBS will display:

Enter search string:

Enter your search target string and press <Return>. Note: The search will ignore character cases, as in a search for the string "Atari" will match on "ATARI", "atari", etc.

After pressing <Return> the system will show the first and last message numbers and present the "Read Cmd" prompt. This allows you to restrict the search, or specify the direction of the search within the message base. To search the entire message base in reverse order, enter a - or R. To search all the messages in the forward direction enter a + or F. To restrict the search to a range of messages enter the message starting and ending numbers, separated by a -, as in 100-200.

Turbo Board will now search the messages for the string you have entered. If a match is found it will display the message. To continue searching press <Return> or enter N. To abort the search enter a Q.

M - Read Marked Messages

The M command is used to read messages that have been marked using the S Scan/mark command. Only those messages marked will be shown.

O - Other Message Bases

To switch message bases use the O (Other) command. You will be shown the same message base selection menu, with asterisks in front of each base with new messages, as displayed when first selecting the message bases from the main menu. Any of the Option commands shown may be used at this point or an individual message base number entered.

S - Scan/Mark Messages

This command will display the same Read Cmd prompt as the Read Messages command. However, once the range of messages to be scanned has been entered only the message number and subject will be shown, along with a prompt asking of the user wishes to mark the message. If a Y is entered the message will be Marked for later reading with the M command. You may quit this routine by hitting Q.

W - Word Wrap Toggle

The W command is used the same way as the /W in the message editor. It will toggle the word wrap on/off for message editing.

@ - Continuous Scroll Toggle

The @ command will toggle continuous scroll on and off while reading messages. If off Turbo Board will stop after each message and display the Read Msg Cmd prompt. If on, Turbo Board will pause for the time set using the # command (see below) after each message. If no key input is received during the pause time Turbo Board will immediately display the next message. If you press any key during the pause Turbo Board will stop and display the Read Msg Cmd prompt, just as if continuous scroll had been off, but only for the current message. To simply stop the text output while reading messages the Control S command may be used.

- Pause Control

The # character at the Msg Cmd prompt will set the time, in 1/10 second intervals, that Turbo Board will pause after each message if continuous scroll is on. To set it to pause for two seconds the value 20 would be entered.

Q - Quit Message Base

This command will return you directly to the main menu.

Turbo Board File System

The File System has been greatly changed in Version 2. The individual *.DIR files that were present in Version 1 of Turbo board are now replaced a single *.FIL file for each download directory that you have on your system, (to a maximum of 20), and are now located in the DATA subdirectory. You may move these FIL files around your system if you like, just have a DATA subdir on all your BBS drives.
A single directory for each file area, now allows you to move around your files at will, all you have to do, is keep them in the same pathname if you move them from drive to drive:

ie MOVE c:\bbs\stfiles*.* G:\bbs\stfiles*.*

Some of the User commands have also changed slightly. There is a new User File editor, and the File Locate commands have also changed. There is also batch uploading for Sealink, Ymodem, Zmodem, and we have also added Ymodem-G.
A quick note on Ymodem-G. Please note that this protocol should NOT be used by any user unless they are using RTS/CTS flow control, and your bbs is using the HST flow control mode. If these conditions are not met, Ymodem-G will usually error out, and be very unreliable. It is meant only for error correcting, high speed modems. If to many problems arise from this we may only allow a Ymodem G up/download on an ARQ connection.

File Areas

Turbo Board maintains files for download in separate file areas as established during system initialization. The file directories contain the information about the files used by Turbo Board when a user looks at the files available for download. Turbo Board creates these directories from the information the user enters when the file is initially uploaded. The file directories are named the same as the file folders the files are stored in, with the extension of .FIL added. So the directory for the files in the STFILES folder would be named STFILES.FIL. There is one FIL file per download area, and these FIL files are located in the DAT subdirectory.

The file information in the directory includes the file name, file number, date uploaded, date last downloaded, number of times downloaded, access level, name of the user who uploaded the file, file type, application, size and language.

Access to each of the file areas is individually controlled for each user by the SysOp. See the SysOp section for the information on setting user access to the file directories.

File Commands

Upon selecting F at the main menu you are shown a menu of available file areas.

Available File Areas:

1 - STFILES - Atari ST Files
2 - PCFILES - PC and MSDOS Compatible files
3 - SYSOP - Atari Sysop Files
4 - TURBO - Turbo Board Support files

L= List ALL NEW files l= List ALL files
S= Scan ALL NEW files s= Scan ALL files

Note that in addition to the file areas, you have the ability to enter the letter of one of four Scan/List Macros.

If a valid number (1, 2 or 3 in the example) is entered you will enter the selected file area and be shown:

Turbo Board Files System

Current file directory is STFILES

Files Cmd (?=List)>

If a question mark or <Return> is entered at the Files Cmd prompt you will be shown the commands that are valid in the File Area:

(A)rchive Tools - For Download of Partial Archives
(B)atch Files Transfer
(C)hoose directories for ALL NEW command
(D)ownload
(F)ind file
(L)ist files
(M)ark file for Batch
(O)ther file directories
(Q)uit
(R)emove from Batch
(S)can files
(T)oggle Continuous Scrolling Directory List On
(U)pload
(V)erbose ARC directory
(W)ide directory listing

xxxxxx total bytes available for uploading
yyyyyy bytes maximum upload file length

Current file directory is STFILES

Files Cmd (?=List)>

Where the xxxxxx is the total free space that is free and allocated for use by the BBS, and yyyyyy is the free space on the drive with the largest free available. The free space figures are slightly smaller than the actual free space to allow a buffer (8K on each drive) so the drives are not completely filled.

A - Archive Tools

This command is used to download, clear or add to the temporary files ARCDL.ARC or LZHDL.LZH. This can only be used in conjunction with files that have been saved on the BBS using the ARC (Archive) or LZH (LHARC) file compression programs. (ZIPDL.ZIP has been held back due to lack of proper ZIP file utilities for the ST. When these become available, we will add the ZIPDL.) When a file is ARCed or LZHed it can contain one or many individual files. If a user desires to download only one file from a larger group of files that have been ARCed or LZHed into a file, he should use the A command at the List Cmd prompt to add it to the appropriate file. ARCDL.ARC for files with a .ARC extender or LZHDL.LZH for files with a .LZH extender. When the Archive Tools command is used Turbo Board will show the files currently contained in ARCDL.ARC, LZHDL.LZH and ZIPDL.ZIP (Note: ZIP support is currently under development and is not supported at this time). If you haven't added any files yet they will all show as empty. You will then be given the following prompt: "Arctools, Enter type: (A)rc (L)zh (Z)ip >". (ZIP files have not been implemented yet.) After making your selection Turbo Board will then display three sub-commands for use with the Archive Tools command:

(A)dd (C)lear (D)ownload.

For ease of reading, in the following the file ARCDL.ARC is used, if you had specified LZHDL.LZH substitute that file name. If Add is selected Turbo Board will ask for the file name or number, then display the individual files within the ARCed file, and ask which file to add. If Clear is selected Turbo Board will erase the current ARCDL.ARC file. Download will allow the user the download the ARCDL.ARC file.

B - Batch Download

Batch file transfer is used after one or more files have been marked for batch download. Files may be marked for batch download using the M command at the Files Cmd, or the B command at the List Cmd. If files have been marked for batch download, then Turbo Board will locate the files that have been marked and then display a sub-menu for selecting the batch file download method:

(Y)modem
(G)Ymodem-G
(S)EAlink
(F)modem
(Z)modem.

If a valid file transfer protocol is entered, either Y, G, S, F, or Z then the transfer will begin. Future versions of Turbo Board will incorporate a Batch File submenu under the B command that will allow you to list the batch files, remove, or add files to the list.

C - Choose Directories

Choosing the directories for the ALL NEW commands is similar to the Y command in the message bases. A list of the file directory short names, with associated numbers, will be displayed and a YES/NO depending on the current state of that directory for the ALL NEW commands. You may enter the number of the directory to switch, stack a list of directories to switch, or press <Return> by itself to end the command. The ALL NEW commands the Choose command is referring to are the L and S commands when selecting a file directory. In our example BBS the C command would show:

1 - STFILES	YES	2 - PCFILES	YES
3 - SYSOP	YES	4 - TURBO	YES

If you did not want to see the Atari ST files when using the L or S commands at the "Select" prompt, they would enter 1 and then press <Return>. Turbo Board will then redisplay the file areas, showing the new status. You may make further changes or press <Return> by itself to exit the C command.

D - Download a File

If you desire to download a file, and know the file name or file number, you may use the D command at the "Files Cmd" prompt. Turbo Board will then search the drives and locate the selected file. After locating the file the file size, transfer blocks using the different file transfer protocols, and time to download will be shown. If you do not have sufficient time remaining to download the file you will be so advised and the D command will be aborted. If sufficient time remains the user will be shown a list of the file transfer protocols to choose from. See the File transfers section for details on the file transfer protocols. Note: The time displayed is the approximate time for the transfer using Xmodem protocol. The actual time may be different depending on the transfer protocol used, number of block retransmittals any delays in saving the file to disk.

F - Find File

The find file command will search every file area you have access to for a match on the string entered with the filename and/or description. This command uses the List command and you may perform the same function manually by using the List and Other file directories commands. When the search for the file has been completed you will be in the last file directory you have access to.

L - List Files

The list command displays the full information on the files, one file at a time unless continuous scroll of the directory lists is enabled. When you enter L for list files, they will be shown a sub-menu of:

(A)ll files
(N)ew since last on
(S)ince specified date
(F)ile number >=
(L)ocate/search

Select>

For all the selections, Turbo Board will only display file information on files that have an access level lower than or equal to your file access level. (A)ll will display all the files that meet this requirement in the current directory.

(N)ew will only show the files that have a date equal to or greater than the date you were last on. Note: New users on their first call will have a last call date of the current date, so would be shown only files uploaded on that date. It is important to remember that this function will show files since the last call date, not necessarily since you last checked the file section.

(S)ince specified date allows you to enter a date in the format mm-dd-yy, and Turbo Board will display the files uploaded on or after that date. This can be used if you do not check the file area each time you call, in order to see the files uploaded since they last checked.

(F)ile number >= will allow you to enter a file number and then display all the file's with a file number that is greater than or equal to the entered number.

(L)ocate/search is a powerful command that will display the prompt:

File Locate:

(N) Name
(D) Description
(A) Application
(U) Uploader
(O) Offline files
(F) Free Files

Select Search Field or Combination>

If Name, Description or Uploader is specified in the search field number you will be shown the prompt:

Enter search string:

If the application is being searched you will be shown a list of the application types and asked to select one.

If you enter O or F, it will search for any file flags for Offline or Free files.

The entry process is the same as the Locate feature of the message bases, ie., the search fields may be combined. When the search fields are combined it is an OR search. For example, if searching the Name and Description (ND entered as the search field) for the string "QUIZ", a match on the string "QUIZ" in either the name OR description will pause the search and display the file. If the search combines a text search with an application search it is still an OR search, so any match on the file application OR the string will result in the file being displayed.

Once the list sub-menu has been completed Turbo Board will display all the files that meet your list parameters and that are at or below your file access level. Turbo Board will display the following information for each file:

File # 452 Filename: EXEC_V25.LZH

Uploaded on	: May 19, 1990	Uploader	: John Miller
Application	: Turbo Board Utility	Level	: 1000
File Type	: Binary	Rating	: 100
Byte count	: 29338	Access Count	: 74
Last Download	: Jan 06, 1991	Download Time	: 2 minutes
Blocks	: 230 -Xmodem/SEAlink,	29-Y/Zmodem, 8-Fmodem	

Description:

Executive version 2.5T - Our Turbo Board version with re-written docs.

List Cmd (?=List)>

If a question mark is entered at the List Cmd prompt the user will see:

(B)atch mark
(D)ownload
(N)ext
(Q)uit
(S)how again

If the file has an extension of .ARC, .LZH or .Zip Turbo Board will also display the choices:

(A)dd to ARC/LZH/ZIPdl
(T)ype File (will extract from archive)
(V)erbose Archive

See the section on Archive Tools, above, for information on the file ARCDL.ARC.

The Verbose listing will display the same information as shown when the Verbose ARC directory is used at the Files Cmd prompt (see below). Type File will allow you to view a text file that is contained in an archived file. Batch mark will mark the file for later download using the Batch Files Transfer as described above, and the Download selection will allow the user to download the file using one of the file transfer protocols described in the File Transfer section.

If a bare <Return> is pressed Turbo Board will default to the Next command and display the next file's information. If the file is downloaded you will be returned following the download to the List Cmd prompt and may resume their listing by pressing <Return> or N for Next file.

M - Mark file for batch

Files may be marked for batch download while listing individual files or from the main Files Cmd prompt by using the M command. Turbo Board will ask for the file name or number for the file to add, then search the drives, looking in the current file directory, for the file and if the file is found, with an access level at or below your access level, it will be added to the list of files for batch download.

O - Other file directories

When an O is typed at the Files Cmd prompt the file area selection menu will be shown. You may select an individual file area or use the ALL commands (L,I,S and s) at this point.

S - Scan files

After selecting Scan files, you will be shown the same sub-menu as for Listing files. When displaying files after the submenu selection has been made, Turbo Board will display each file on a separate line with the information shown of:

#=Off-line file, * = Free Download

Number	Filename	Length	U/L'ed	Description
* 452)	EXEC_V25.LZH	29338	05/19/90	Executive version 2.5T - Our

(The description is the first 40 characters of the first line in the file's description.)

Notice the # =Offline file, and * =Free File. If the file you want to download has a # in front of it, you will have to ask the Sysop to place the file back online, as the actual file has been removed from the system.
If the file is marked with a *, it is a free download, and if this bbs has a ratio system in effect, you will not be charged for the download.

You will also be shown a Scan Cmd> submenu, that will allow you to:

(A)rc	- Use Arc Tools
(B)atch	- Batch Mark files
(D)ownload	- Download Files
(E)dit	- Edit files (if privilege is given)
(L)ist	- List File
(P)rev	- Backup to Previous Page of scanned files
(Q)uit	- Quit to File Cmd menu
(S)how	- Show current page of scanned files again
(T)ype	- Type out file (ascii dl) or extract from Arc and type
(V)erbose	- Verbose listing of Arc Lzh or Zip archive files

All these commands are shown on one line for reference. They are displayed as shown for explanation only.

T - Toggle Continuous Scrolling Directory List On/Off

Normally Turbo Board shows a single file at a time when listing files, or a screen at a time when scanning or using the Wide directory listings. To have Turbo Board display the files without stopping use the T command to switch to continuous scroll on. Once set on it may be turned back off by again using the T command.

U - Upload

To upload a file to the file area the U command is used. When entered the system will ask:

Batch upload?

For now enter a N at this prompt. See Batch Uploading for more information on Batch Uploading.

You will then see the prompt:

Enter filename:

Enter the filename, and the system will then show you the name and ask you to verify that is the correct name of the file to upload. (Please note that you MUST enter both a name and extension, Turbo Board will not allow anything but a proper filename.) If the filename is correct Turbo Board will then do a search of the file directories to see if there is a duplicate file name already on the BBS. If there is it will say:

Filename in use. Try another name.

And again show the "Enter filename" prompt. Once a valid name not in use has been selected Turbo Board will ask:

Enter YOUR rating of this file (0-100):

Now you can rate this file, if it is a good one, give it a high rating, if not so good, give it a low one. Hitting <Return> will give it a rating of 50.

If you have been given the privilege, the system will then prompt you if you wish to make the file, a 'Free' Download, so if a ratio is being used, the people will not be charged for downloading this file

If Turbo Board didn't recognise the extension of the file you will then be asked whether the file is an Ascii text or binary file. Only text files should be specified as Ascii, all others should be binary.

Next you will be asked to enter the type of application that the file is. You will be given a menu of the various choices and then asked to input the number of your choice at the following prompt:

Select program application type:

Next the System prompts you for what access that you wish to place the uploaded files at:

Access to: (A)ll (S)ysop (Y)our Access (1000):

If you hit (Y)our access, the file access will be set to 1000 in this example. Access to (A)ll sets the access to 0, and access to (S)ysop sets the access to 32767.

After selecting an access level you will use the message editor to enter a description of the file. This description may be up to five lines in length.
The same editor commands as used to enter messages are used. If the description is saved using the /S command the user will then be asked to select a file transfer protocol. See the File Transfer Protocol section for an explanation of the protocols used by Turbo Board.

If the BBS is running low on drive space you will be asked if the file length is greater than the maximum single drive free space. If you answer No the file transfer will begin. If yes the file transfer will be aborted.

If the file is uploaded successfully the log will be annotated with the file information entered by the user. It will also be noted in the UPLOAD.LOG file.

V - Verbose ARC directory

The V command may be used to display the contents of an ARCed or LZH'ed file on-line. If selected from the main Files Cmd prompt the user will be asked for the file number or name. If a valid file name or number is entered and the file is either an ARCed ot LZH'ed file, Turbo Board will display the individual entries within the file using the format:

Filename	Size	Comp%	Comp	Date	Time	Method	CRC
WHEEL.BAS	6656	4676	30%	14-02-89	12:35:02	Crunched	2B5D
Total 1	6656	4676	30%				

W - Wide directory listing

The last of the three file listing methods is the Wide directory listing. This selection will also display the same sub-directory as used by the L and S commands, but when displaying the files will only show the file name and size. It does this in three columns across the screen, as in:

SIMON.ARC	1505	SWITCH.ARC	8287	ROAD.ARC	7150
ANADATA.ARC	14144	POWER.AMS	2586		

If continuous file directory scroll is off it will stop after every 15 lines and allow you to continue the listing (the N command, or a 'bare' <Return>), Download a file or Quit the listing. If continuous scroll is on all files that meet the user's selection criteria will be displayed, non-stop. This is handy for capturing a list of the files on the BBS.

Batch Uploading

To batch upload a file to the file area the U command is used. When entered the system will ask:

Batch upload?

Enter Y at this prompt, and the system will then ask you if you wish to hang up after the batch upload has been completed. If you answer Y here, you will be logged out, after the transfer is finished.

Next the System prompts you for what access that you wish to place the uploaded files at:

Access to: (A)ll (S)ysop (Y)our Access (1000):

If you hit (Y)our access, the file access will be set to 1000 in this example. Access to (A)ll sets the access to 0, and access to (S)ysop sets the access to 32767.

You are then prompted for the batch protocol you wish to use:

(F) - Fmodem
(S) - SEAlink
(Y) - Ymodem
(G) - Ymodem G
(Z) - Zmodem

At this point you will select the transfer and then batch upload the files that you wish to send.

Usually how you select the files for a batch upload, is you place them all into a subdirectory on your system, with ONLY the files you wish to batch upload present in the subdirectory. Change your current directory to this directory, then select the batch upload protocol, (one of the ones previously listed) and use the *.* mask

as your file parameter. Start the transfer, and Turbo Board will accept all the files you wish to upload.

After the transfer is over, you will be prompted to update all the pending files that you have batch uploaded. To do this, use the X command. It will then take you to the files, and step you through them one by one, allowing you to fill in the descriptions, and to select the proper destination file directory for each one.

File Transfer Protocols

When a file is to be uploaded or downloaded Turbo Board will display the following prompt:

Select file transfer protocol (?=List, <Return>=Abort):

If a question mark is entered the options below will be shown:

(A) - Ascii / Xon-Xoff
(F) - Fmodem
(S) - SEAlink
(X) - Xmodem
(K) - Ymodem / Xmodem 1k block
(Y) - Ymodem Batch
(G) - Ymodem G Batch
(Z) - Zmodem
(8) - 8 bit Atari Xmodem

Ascii / Xon-Xoff

If a file is transferred using the Ascii method it will be sent with no error correction - a straight 'dump' of the file. This is useful only for text files. The Xon-Xoff refers to the characters used to start and stop the file transmission. Xon is the <Control> Q character, Xoff is the <Control> S character. Note: Ascii / Xon-Xoff may not be selected as the transfer method when uploading if the file type was specified as binary.

Fmodem (4K block)

Fmodem is one of the five batch capable file transfer protocols available on Turbo Board. A batch transfer protocol has the ability to send multiple files from the BBS to the user automatically. You must first mark the file(s) for batch download, then select B at the main Files Cmd prompt. Also, your terminal program must, of course, support the batch file transfer method being used. Batch transfers may be used to upload or download files to the BBS.

Fmodem is similar to Ymodem batch, but uses 4K block size instead of the 1K used by Ymodem. This results in fewer control bytes being transferred, and less time spent in 'turn around' waiting for the acknowledgement of each block of data. Because of the large block size however, a single bad block can negate any gain

achieved by the larger block size. For this reason Fmodem should only be used on connections that perform independent error checking, such as between two USRobotics HST modems, or two MNP equipped modems. MNP is the Microcomm Networking Protocol, a proprietary error correction scheme available on many modems.

SEAlink

SEAlink is a sliding window Xmodem derivative developed by System Enhancement Associates. 128 byte data blocks are used, but the sender does not wait after each block is sent for an acknowledgment that the block was received correctly. Instead, each block acknowledgement is 'labelled' for the block it is referring to and the sender may continue to send blocks until the 'window', which is the number of blocks the sender may 'get ahead', is reached. If a bad block is received the receiver sends a NAK (Not AcKnowledged) signal, with the block number of the bad block, and the sender goes back to the bad block and begins sending again.

This protocol is the most efficient method when there are inherent delays in the communications link, such as when a packet switching network is used. An example of a packet switching network is the PCPursuit system.

SEAlink is also a batch file transfer capable protocol.

Xmodem

Xmodem is one of the oldest file transfer protocols available. It was originally developed by Ward Christensen circa 1979, using 128 byte blocks and checksum error checking. Since then many variations have come about, the most common being the use of CRC (Cyclical Redundancy Check) error checking. With standard checksum error checking, one out of every 256 erroneous complete or oversized Xmodem packets would have a 'valid' checksum. When CRC error detection is used the theoretical calculations show it will allow only one undetected error for every 10^14 bits transmitted. That equates to one undetected error per 30 years of constant transmission at one megabit per second! However, sometimes theoretical calculations and reality do not agree. Still, CRC error detection provides a very high reliability of detecting any bad data before it is saved.

If downloading a file the type of error detection will depend on the terminal program being used by the receiver. When uploading a file Turbo Board will attempt to use CRC error checking first. If the file transmission does not start with Turbo Board sending the CRC NAK character, it will switch to checksum error correction and send the checksum NAK character. Because of this procedure, users who are trying to use CRC error detection on uploads must begin the file transfer as soon as possible. If there is too long a delay from the time the BBS says it is ready to receive until the first block is received, Turbo Board will have switched to checksum error detection and the transfer will be aborted.

Ymodem

Ymodem is similar to Xmodem, but always uses CRC error checking and has 1K block sizes. Ymodem is also batch capable, but many terminal programs do not support the batch Ymodem protocol. If you have questions you should look in their terminal documentation to see if it supports batch file downloads using Ymodem.

Ymodem G

Ymodem G is a variant of the regular Ymodem Batch transfer, and is intended for use with error correcting modems only. It will abort on any error it encounters, but if used properly, will give the highest cps rate of any of the protocols available. See Ymodem for additional information.

Zmodem

Zmodem also uses 1k blocks of data. It does it's error checking 'on the fly' so there is no waiting for ACKs or NAKs. Zmodem is also batch capable and is best used with a 9600 error correcting modem, although it will correct for any errors encountered during transmission. It is faster than Ymodem Batch or Fmodem, but not as quick as Ymodem G for transfer rates.

8-bit Atari Xmodem

The 8-bit Atari Xmodem is Xmodem with checksum (CHK) error detection. It will not attempt to use CRC error detection. If your terminal program does not support Xmodem CRC, then you should use the Atari 8-bit Xmodem protocol even if not using an Atari. This transfer protocol is also designed to work with the Amodem terminal program, some early versions of which used non-standard Xmodem parameters. If an Atari 8-bit user has a terminal program that supports Xmodem CRC, then they should select the Xmodem transfer protocol and not the 8-bit Atari protocol.

The Turbo Board V2 Database

Version 2 of Turbo Board comes with a new Database, that replaces the older Forem style database in Version 1. This new Database has the following features:

- Users may upload, and automatically update file entries without the sysop having to laboriously include new file entries

- Users may upload complete submenus in a database if given the privilege

- No cryptic database filenames are required, any file whether a text file or a text file in an archive (ARC or LZH) may be posted, and displayed as text files will be automatically extracted if a user wishes to display them

- The Bulletin Database is now separate from any other database, and can have it's own access level

- Database entries may be listed out, so they may include a more complete description

- Database entries may also be flagged as free downloads

* Note *

Please note that there are two Database SYS files included with Turbo Board. The DBASE.SYS file is the default Database and it is the new style database. If you wish to use the old style database, you will have to do the following:

Rename DBASE.SYS to NEWDBASE.SYS
Rename OLDDBASE.SYS to DBASE.SYS

Turbo Board will now load the old database instead of the new one. Since the old and the new Databases are incompatible, you can use the old Database module for your old Turbo Version 1 or Forem ST database files until you have constructed a new database.

Setup of the New Database

First decide how many databases you require and edit the file called TDBASE.LST which is the Database list.

It has a file setup as:

Database Folder Name
Database System Name
Accesslevel (BULLETIN FLAG)

This is the sample TDBASE.LST on your Distribution disk:

```
BULLETIN
///Turbo Board Bulletins
0 BULLETIN
DATABASE
///Turbo Board ST Database
10
DBTURBO
///Turbo Board Sysop's Database
1000
DBSYSOP
The Sysop's Database
32767
```

The preceding example shows four databases in use. The first one, has a folder name of BULLETIN and is flagged as the BULLETIN Database. If you have logon bulletins enabled in TURBO.OPT then this database will be shown when you log on the system. It can also be shown from the B system command or the D command.

If you would like new users to see this bulletin, then keep the access level to 0.

The next 3 databases have various purposes on our support board, the first being a low access general database, the second a Turbo Sysop database, and the last database having a Sysop access level, as it contains various system logs.

Entering Database Files

To enter files in your Data Base, just copy the files that you want to place in your database, and then log on, and select the database that you wish to edit.
If you have the Sysop Database menu enabled in your password profile, then you will see the following menu at the database prompt:

```
Select (?=List)> ?

(A)dd File/Sub-Menu
(C)ompare
(D)elete
(E)dit
(F)lags
(S)wap
(#) toggle off-line
(*) toggle free DL

(L)ist entry info
(Q)uit
(T)oggle protocols
```

We have constructed the Database system similarly to the file system, with separate record files for each database entry. Instead of FIL files, the database uses TDB files, for directories, these being located in the DAT subdirectories. One change of course, is we have submenus in our database. Please notice that the Sysop Commands are similar to the File System commands. Files are entered the same way either by uploading or comparing the files to the database records. A single file is attached to each database record, with some differences, if the record is marked as a submenu instead of an entry. You may also set file access levels for each file entry, if you do not wish low access users to view a particular file.

Additionally you may change the order of the Database entries with the Swap command. You may also set the Off-line and Free flags for your entries if you choose to use them.

A normal user will only see the List entry info, Toggle Protocols and the Quit command. If he has been given the database upload privilege he will also see an Upload to Database function.

There are also two special files that you may use for the root menu of your database. You may display a file instead of the file listings, or you may choose to display a header file before the file listings. These text files have reserved names and they are as follows:

ROOT0.TXT - will display this file instead of the file list

ROOT1.TXT - will display this file before file listing

Please note that the use of these files is optional, but if you do use them, please ensure that they go into the proper database subdirectory. Each database may have a ROOT0 or a ROOT1, you may only use one or the other.

Submenus, may also utilize text files instead of file listings, or before file listings, but this is an attribute that you set when you create the submenu entry.

Chapter 4 - Turbo SysOp Functions

Turbo Board offers a host of SysOp functions. You have already seen some in the quick foray taken when performing the initial system setup. We will now cover all the functions in-depth.

Before covering the SysOp commands available while in SysOp mode, there are some functions the SysOp may invoke at any time that need to be covered. These functions are controlled by the Function keys of the computer.

Function Key Assignments

The F1 and F2 keys are covered in the next section, entitled "Entering Sysop Mode".

F3 will 'force' the current user into SysOp mode, even if they do not have SysOp privileges. This is convenient for demonstrating the SysOp functions to a user, or for sending/receiving a file using the SysOp's disk operations functions.

F4 toggles a hard copy of the current session on and off. All text displayed by Turbo Board and all text received from the user will be sent to the printer as well as the screen.

F5 toggles the snoop mode on and off. The normal state is on. When off the status window will be updated, but no 'call monitoring' will take place in the main window.

F6 will toggle the status window off and on. While the status window is off, you are in a VT-52 mode locally.

F7 is used to reset the colours for your local screen in case a user leaves a message containing VT-52 escape codes and doesn't reset the colours correctly.

F8 is a console login reserve, so the sysop may reserve the console after the present caller has logged off. After the present caller has left, the board will ring the bell, display a message "Waiting for Console Login..." and take the modem off-hook for 10 minutes. If you don't log on within this time, the board will revert back to normal wait ring operation and the modem will go back on-hook.

F9 is used to toggle the screen save feature off and on.

F10 will clear all the counters in the status window, as if the system had been re-booted.

Hitting the <Help> key will show the file HELP_FNK.TXT which also attempts to explain the function key assignments. Hitting the <Undo> Key will ATTEMPT to abort any file transfer in progress.

There are also a few other Key combinations that you will be using:

<Control>-<Alternate>-K

This command will 'kill' Turbo Board from anywhere in the system or at the waitring screen.

<Alternate-D>

This command will enter you into the DOS shell. If a user is online, he will be 'frozen' out until you exit the shell.

<Control>-D

This command will enter the DOS shell, and if a user is online, he will also be entered into DOS with you.

<Esc>

The escape key will enter the chat mode if a user is online, without having to first enter the Sysop mode. Make sure that the Snoop mode (F5) is on, so you will see what the user is typing!

<Control>-<Clr Home>

This key combination will toggle the keyboard lock feature of Turbo Board, so you may leave the board unattended without having to worry about small children or animals playing with the local keyboard. The keyboard lock may also be set to default on from TURBO.OPT.

Entering Sysop Mode

There are two ways to enter the SysOp mode in Turbo Board. The first way is to press the F1 or F2 keys. If there is no user on the system these will operate identically, bringing the Sysop> prompt up and lowering the modem control line. This line is lowered so the modem will not answer a call while you are in SysOp mode. If a user is on and the F1 key is pressed they will be shown the third line in the file PROMPT.TXT. This file is fully explained in Chapter 7, Customizing Turbo Board. If a user is on the system when the F2 key is pressed, no explanation will be shown and it will appear as though the BBS has 'locked up' to the user. If you only need to jump in real quick to perform some function, the F2 key gives you the ability, often with the user never noticing the 'dead' system, and without your having to explain to the user why you are taking temporary control.

The second way to enter SysOp mode is through the $ command at the main menu. The user must have the ability to use this command set in his profile, and the REMOTE SYSOP line in TURBO.OPT must be ON unless it was a local log-on to the system.

SysOp Commands

Upon entering SysOp mode you will see the prompt "Sysop>" To see a list of commands press <Return>. Turbo Board displays the file named SYSMOD.TXT to show the commands available. You should see:

Sysop Commands
~~~~~~~~~~~~~~

A - Accounting
B - Edit BBS list
C - Chat mode / Call Executive
D - DOS Shell
E - Email System
F - File Directory Editor
G - Get system configuration data
H - Hang up current user
I - Edit File with Message Editor
L - Display/Print Log file
M - E-Mail Cleanup
N - Set Time
O - Reload Option/Data files
P - Toggle Printer log to disk
R - Reserve System for User
S - System status
T - Give user more time
U - Set (online) user data
V - Validate password
X - Exit sysop mode
Y - Toggle Chat mode on/off
Z - Delete Received Messages

DOS - End run of Turbo Board
> - Quick Exit

Sysop>

NOTE: If a system parameter is changed in SysOp mode, such as chat on/off, it will only affect the status for the current run of Turbo Board. To permanently change the status the setting in TURBO.OPT must be changed.

A - Accounting

Turbo Board keeps a tally of certain parameters for each user. This tally is printed out and reset at the beginning of each month if ACCOUNTING is ON in TURBO.OPT. To print the current user statistics the A command is used in SysOp mode. When the A command is used the tally is not reset. The printout will go to the system log (printer if LOG TO DISK is OFF in TURBO.OPT, TURBO.LOG if LOG TO DISK is ON) when the A command is used. To have the printout go to the screen instead of the system log, use the # command. (Note: this is not a displayed command in the standard SYSMOD.TXT file.) The printout generated at end of month if ACCOUNTING is ON in TURBO.OPT, or when the A command is used looks like:

Accounting as of Mar 28, 1990

Name	Account	Conn	DL	UL	MESS	MAIL	DBD	DBU
JOHN MILLER		125	0	24	90	31	0	0
BILL MILLER		65	0	0	12	10	0	0

Account is the optional account number field.
Conn is the total connect time for the month
DL is the total number of file downloads since accounting was reset
UL is the total number of file uploads since accounting was reset
~~~~~~~~~~~~~~

MESS is the total number of messages entered into all message bases except E-Mail messages
MAIL is the total number of E-Mail messages sent by the user
DBD is the total number of database files read by the user
DBU is the total number of database files uploaded by the user

Note: Even if accounting is OFF Turbo Board will reset the user's total connect time to zero at the end of each month. The remaining values (uploads, downloads, etc) will continue to accumulate unless accounting is ON.

B - Edit BBS list

If B is selected you will be shown the same sub-menu as displayed when the O (Other BBS list) option is chosen at the main Turbo Board menu. In SysOp edit mode though the system will display each BBS that meets your search parameter one at a time and ask:

0-Edit 1-Delete 2-Exit <return>=next:
If edit is selected you will be asked to re-enter the data for the BBS.

C - Chat mode

The C command is used to enter chat mode if a user is on the BBS. If a user requests a chat and you desire to oblige them, or if you desire to chat with a user even if they have not requested a chat, first press either the F1 or F2 function key. If F1 is selected the system will display the third line of PROMPT.TXT. If F2 is pressed no text will be shown the user. Now that you are in SysOp mode press C for chat and the BBS will send to the user the fourth line of PROMPT.TXT, following which you will be able to 'chat' via the keyboard with your user. To exit the chat mode press the ESC (Escape) key.

C - Call Executive

If you enter chat mode directly by pressing the F1 or F2 function keys, while no user is on the BBS, the C command will load the program named EXECUTE.PRG. This file is included on your distribution disk and is the full version of The Executive for your use. Executive allows you to install many Gem or Tos programs from a drop-down menu. The documentation for Executive is included on the release disk.

D - DOS Shell

Turbo Board includes its own DOS environment for you to use for disk operations while the BBS is still running. We modeled our shell for the most part after the MSdos shell that is very popular with PCs.

Note: See the appendix on Batch Files for more information on programming your own batch files for use with Turbo Board.

If you are familiar with MSdos, you will have no problem in getting around the Dos Shell. First select D at the main Sysop> prompt, this will bring you into the Shell Environment. To see a list of the available commands, press ? and hit <Return>.

BREAK	CD	CHDIR	CLS	COPY	DEL	DIR
ECHO	EDIT	ENVCLR	ERASE	EXIT	GOTO	HANGUP
IF	LDOPT	MD	MKDIR	MOVE	PATH	PAUSE
PRINT	Q	RD	RECEIVE	REM	REN	RENAME
RMDIR	SEND	SET	TOUCH	TYPE	VERSION	X
?						

C:\BBS >

Dos Shell Command Summary

BREAK

Allows user to cancel a batch file during execution with a CTRL-C. If Break is off user cannot cancel a batch file. The break is always set to OFF before execution of any batch file, therefore it must be manually set ON in the batch file.

Syntax:
break on
break off

CHDIR (CD)

Changes a directory to a different path. (shown as the prompt). The full drive and path can be changed if in one line if need be. CD by itself will change to the root (\) directory.

Syntax:
chdir (drive:)(path)
cd (drive:)(path)

Examples:

chdir ddst	(if the folder DDST is in the current directory)
cd\ddst	(if the folder DDST is off the root directory)
cd e:\tc\bin	(go directly to E:\TC\BIN directory)
cd..	(go back to the parent directory)

To change to another drive only, simply type the drive letter and a colon (C:, D:).

CLS

Clears the screen leaving only the prompt.

Syntax:
cls

COPY

Copies one or more files to another location. If destination file(s) are the same as the source file(s) the original destination file(s) are deleted without the user being prompted. Files can be appended using the /A switch or can be copied date

conditionally using the /D switch.

A quick ascii file can also be created by typing:

copy con file.txt

This will copy any input from the keyboard to a text file called file.txt. A ctrl-Z <return> will save the file and exit from the copy con mode.

Syntax:
copy (drive:)<source> (drive:)(destination) (/A)(/D)
copy con <filename>

Examples:
copy fmail*.* (copy all files in the folder FMAIL to the current directory)

copy *.* a:\ (copy all files in current dir to A:\)

copy turbo.dat forem.dat	(copy the file TURBO.DAT to a file called FOREM.DAT)
copy a.txt b.txt /a	(append A.TXT to B.TXT)
copy *.txt a:\big.txt /a	(append ALL *.TXT files to the file BIG.TXT on A:)
copy *.* a:\ /d	(copy all files in current dir to A:\ only if the destination file is not found or the dest date is less than the source date)

DEL (ERASE)

Deletes all file(s) specified by the drive and pathname.

Syntax:
del (drive:)pathname
erase (drive:)pathname

Examples:

del *.txt	(delete all *.TXT files in current dir)
erase *.*	(delete all files in the current dir)
del c:\bbs\turbo.dat	(delete the file turbo.dat)

DIR
Lists the files in the current or specified directory in normal or wide format if used with the /W switch. Also by using the /D switch files can be sorted by date.

Syntax:
dir (drive:)(pathname)(/W/D)

Examples:

dir	(all files in current dir sorted by name)
dir /d	(all files in current dir sorted by date)
dir *.txt	(all *.TXT files in current dir)
dir e:\tmp	(all files in E:\TMP)

dir /w (all files in current listed in WIDE format)

ECHO (batch only)

Echoes a line of text to the screen.

Syntax:
echo (text)(env strings)(# macros)

Examples:
echo Bill was here
echo Hi there #FNAME, the date is #DATE and the time is #TIME
echo The current path is %PATH%

EDIT

Calls the system editor. Same as 'I' from the sysop prompt. If no parameters are passed you will be prompted for a filename. If the file is not found it will be created if you choose to.

Syntax:
edit (drive:)(path)(filename)

ENVCLR

Clears ALL environment strings.

Syntax: envclr

EXIT

Exits immediately from a batch file to the parent batch file. You cannot exit from the CLI with EXIT (see Q & X). The errorlevel can also be set using EXIT.

Syntax: exit (errorlevel)

Example:
exit
exit -1

GOTO (batch only)

Processes lines after the specified label. A label can be any ascii string starting with a colon. The label must be on a line by itself and is NOT case sensitive.

Syntax:
goto <label>

Example:
goto bill
This line will be skipped over

:bill

HANGUP

Will hangup the current user (if one is online or local), exit out the DOS shell and enter wait mode.

Syntax:
hangup

IF (batch only)

Performs a command based on the result of a condition.

Syntax:
if (not) errorlevel <number> <command>
if (not) <string1> == <string2> <command>
if (not) exist <filename> <command>

Examples:
if not #FNAME == Bill echo You're not Bill...
if exist turbo.opt ldopt

```
if not exist ask.ttp exit
:loop
ask "Enter 7 to quit: " NUM=2
if not errorlevel 7 goto loop
```

LDOPT

Reloads the TURBO.OPT and other data files into the system. Same as 'O' from the sysop prompt.

Syntax:
ldopt

MKDIR (MD)

Make a directory. If there already is a directory or file with the same name as the one you specify, then access will be denied.

Syntax:
mkdir (drive:)<path>
md (drive:)<path>

Examples:

mkdir temp	(create a TEMP folder in the current directory)
md e:\tc\turbo	(create a TURBO folder in the E:\TC directory)

MOVE

Move one or more files to another location. If the destination file exists it will be deleted before the move. Files on the same drive are simply renamed into the new destination. Files moved to another drive are copied first, if successful the source file is deleted.

Syntax:
move (drive:)<source> (drive:)(destination)

Examples
see COPY.The syntax is identical to the command copy except there are no switches.

PATH

Sets the system PATH environment string. Tells Turbo Board in which directories to search for external executable files after it searches the current directory. Note that BAT files are automatically looked for in the BAT directory after searching the current directory.

Syntax:
path (drive:)(path)(;(drive:)(path)...)

Example:
path c:\;c:\utils;f:\misc

PAUSE (batch only)

Sends the prompt "Any key continues" and waits for a key press.

Syntax:
pause

Example:
```
@echo off
break on
echo The Executive <Hit Ctrl-C to cancel load>
pause
execute.prg
```

PRINT

Print any file to the printer.

Syntax:
print (drive:)(path)<filename>

Example:
print mesage\mesdesc.dat

Q (X)

Quit DOS shell.

RMDIR (RD)

Remove directory. The directory must be empty to be deleted.

Syntax:
rmdir <directory>
rd <directory>

Example:
del temp*.*
rd temp

RECEIVE

Upload files to the current drive and directory or to a specified drive and directory. You may also batch upload files if you use a wildcard (*.*).

Syntax:
receive (drive:)(path)(filename)

Examples:
receive (you will then be prompted for a batch upload)
receive ask.ttp
receive f:\misc\ask.ttp

REM

Remarks line. Any line in a batch file with a REM at the beginning will be ignored by the batch interpreter.

Syntax:
@echo off
rem copy source files
copy e:\tc\turbo*.c a:\ /d
rem copy header files
copy e:\tc\turbo*.h a:\ /d

RENAME (REN)

Rename a file or directory.

Syntax:
ren <old name> <new name>

Examples:
ren 2_turbo.prg turbo_2.prg

md tempx
ren tempx temp

SEND

Download a file from and drive and directory. By typing a wildcard in the filename (?*) you can batch download files. Note that you can only batch download files from the current directory.

Syntax:
send (drive:)(path)<filename>
send <wildcards>

Examples:
send f:\misc\ask.ttp
send turbo.opt
send *.txt

SET

Create, change or view environment strings. Typing SET by itself will show you the current environment strings. See tutorial on the use of environment strings and # macros. The size of the environment memory is limited but can be set to as much as 32K bytes in the TURBO.OPT file.

Syntax:
set
set <name> = <string>

Examples:
set bill = Bill was here
set (to view environment table)

TOUCH

Updates a file(s) creation date and time to that of the system date and time.

Syntax:
touch (drive:)(path)<filename>

Examples:
touch turbo.opt
touch dat*.fil

TYPE

View a file and/or archive's contents.

Syntax:
type (drive:)(path)<filename>

Example:
type ddst\ddstv125.lzh
type turbo.opt

VERSION

Displays the version of Turbo Board that you are running.

Syntax:
version

?

Displays all available DOS commands.

Syntax:
?

E - E-Mail System

You will enter the Turbo Board E-Mail system and may read and send messages. This allows you to "answer the mail" without going through a complete log-on. (ie., enter SysOp mode by pressing the F1 or F2 when no user is on the system. Then press E to read/answer your mail. When finished, enter a Q to quit the E-mail section and you will return to the Sysop> prompt where you may press X to exit and return the BBS to the waitring state.)

Note: the Sysop may not enter the E-mail system if a user is online and is presently in either the E-mail, F-mail, or Message System. You will see a "System Error" and an entry in the log will state that you cannot enter the E-mail system.

F - File Directories Editor

Hitting F will show the following Submenu:

(A) Add
(C) Compare
(E) Edit
(F) Set/clear/toggle flags
(P) Print list to screen/printer/log/file
(R) Renumber ALL files
(S) Scan ALL directories for sysop files
(U) Update DIR last file date

Select>

Add Files to File System

This Function allows you to add new files to the file system. If selected, the system will prompt you for the download directory, and then ask for the filename to be added, plus all of the information normally asked when uploading a file.

Compare Directories for new added files

This function is similar to Add files, but the system will automatically scan the selected directory for new files, and prompt you to update them. You may also rename the file, view it, or delete it.

Edit File Entries

When you select this function, you will be prompted for the file directory and then you will be shown a sub menu:

Edit search menu

(D) Not accessed in N days
(F) Search for filename
(G) General Edit (=<CR>)
(L) Access level
(S) Uploaded since date
(T) Uploaded to date
(X) Exit

Select search mode>

From here you are sent to the editor as file entries that match the search criteria are found. Notice that there is a new search function, Uploaded to date, so you may check out old files.

Set or Clear Flags on File Entries

This option also has a submenu after you select the directory. It is very similar to the File Edit submenu.

Flag set search menu

(D) Not accessed in N days
(F) Search for filename
(G) Global, all files (=<CR>)
(L) Access level
(S) Uploaded since date
(T) Uploaded to date
(X) Exit

Select search mode>

Enter last date to search (mm-dd-yy): 01-01-90

I:\BBS\DAT\STFILES.FIL

(C)lear, (S)et or (T)oggle flags: s

Enter mask combination (<CR>=quit, (A)rchived, (F)ree, (D)eletion):

At this point you can enter in one of three flags.

The Archived Flag tells the user that the file is no longer on the system and he must ask the Sysop to post the file. Please note that it is up to you to remove files that you mark as Archived (off line), the system will not do it for you.

The Free flag is used if you are running a File ratio system. It will tell people that they can download a file, and their ratios will not be charged with the download.

The Deletion flag will delete all the file entries, and their attached files when you quit the editor. USE THIS FUNCTION WITH CAUTION!!!

Print File directory Lists

This function will provide you with either a printed hard copy, a file, log dump, or a screen dump of the selected file directory. You can select either the Scan or List formats.

This is an example of the Long list:

Directory of Download Directory: I:\BBS\DAT\TURBO.FIL on May 25, 1991

File # 364	Filename: TURBO.LZH		
Uploaded on	: May 13, 1991	Uploader	: John Miller
Application	: Turbo Board Update	Level	: 1000
File Type	: Binary	Rating	: 50
Byte count	: 151855	Access Count	: 803
Last Download	: Apr 28, 1991	Download Time	: 2 minutes
Blocks	: 1187-Xmodem/SEAlink,	149-Y/Zmodem,38-Fmodem	

Description:

Turbo Board V1.0 05/11/91 release
<edited for brevity>

End of listing, 53 files found.

This is an example of the Scan List:

Directory of Download Directory: I:\BBS\DAT\TURBO.FIL on May 25, 1991

364) TURBO.LZH	151855	05/13/91	///Turbo Board V1.0 05/11/91 release
365) DDST125T.LZH	79725	05/17/90	Special Version of DDST v1.25 create
366) BT_TURBO.ARC	11255	07/30/90	Batch files for Binkley term running
367) EXEC_25T.LZH	29338	05/19/90	Executive Ver 2.5T - Our Turbo Boar

<edited for brevity>

End of listing, 53 files found.

Renumber ALL Files

This function is the same as the renumber function in Version 1.

Scan ALL directories for Sysop files

You may now scan any directory for Sysop Access (32767) files, so you may edit them easily.

User File Editor

The File editor is now also available on the User side of the System. All the File Commands have been masked for each user in his password profile, so you may give a user only certain commands instead of allowing him to use all of them.

File # 1	Filename: LHARC051.ARC <FREE download>		
Uploaded on	: Nov 23, 1989	Uploader	: Frank Klaess
Application	: Utilities	Level	: 10
File Type	: Binary	Rating	: 50
Byte count	: 52224	Access Count	: 15
Last Download	: May 12, 1991	Download Time	: 1 minutes
Blocks	: 409-Xmodem/SEAlink, 52-Y/Zmodem, 13-Fmodem		

Description:

LHarc Ver 0.51 beta for the ST, by Jon Webb

(A) Application	(C) Copy file	(D) Description	(E) Enter all fields
(F) Flags	(L) Level	(M) Move file	(N) Re-name file
(R) Remove file	(T) Touch date	(U) Uploader	(V) Verbose/Type
(W) Rating	(X) Exit/Abort	(Q) Quit/Update	

The file editor is the same whether it has been accessed from the sysop mode or from the file section on the bbs. The entries are straight forward, but a couple of them require explanation.

Copy File - This function copies the file to a pathname you supply. It doesn't do anything to the file listing.

Flags - These are the same flags as discussed in the Sysop file editor.

Move File - This function is similar to the move function in version 1

Rating - This function may or may not be of use to you, it merely allows a user to rate a file on a scale of 0 - 100, the default being 50.

Exit - You can abort any changes to the edit fields using this function

Quit - This allows you to quit the edit and Update the file entry

G - Get System Configuration Data

The G command will show you information concerning your current configuration, as shown in this sample hypothetical printout:

```
Number of message bases          : 3

Name                             : Email
Maximum number of messages       : 75
Current number of messages       : 36
Next message number              : 2454

Name                             : General messages
Maximum number of messages       : 80
Current number of messages       : 80
Next message number              : 734

Name                             : Atari Specific
Maximum number of messages       : 500
Current number of messages       : 500
Next message number              : 1091

Number of drives online          : 4
Drive search order               : CDEF
Maximum number of user passwords: 500
Free password file entries       : 336

Free disk space                  : 100214240 bytes

C: 15223264
D: 28167936
E: 28191488
F: 28631552

Number of download directories   : 5
     STFILES
     PCFILES
     SYSOP
     TURBO
     UPLOAD
Number of data bases             : 4
     BULLETIN  - Blitbit Systems Bulletins
     TDBASE    - General Database
     ATARI     - Atari Database
     IBM_DB    - IBM Database

Macro Keys:
Alt-F1: The SysOp sees your request, be with you in a minute...
ALT-F2: menu/f/3/l/l/1/turbo.lzh
```

The macro key data is from the file named MKEYS.DAT. This is a file you create using a text editor and contains a single line of text for each of the

<Alternate><function key> combinations. This means you may have up to ten lines of text in the file. When you or a user is on the system and you hold down the <Alternate> key and then press one of the Function keys, the line of text corresponding to the number of the function key will be displayed. If you are at a command prompt, and the line you send has valid commands, they will be executed.

H- Hang up Current User

Pressing H with a user on the system will perform the same function as the user typing OFF. Turbo Board will display "Hang up requested" and log the user off.

I - Edit File with Message Editor

You may edit any file on your attached drives by using the I command. The editor is limited to 200 lines of text. If the file exceeds 200 lines a warning will be displayed and you may abort the edit if you desire. After selecting I Turbo Board will ask "Enter filename to edit:". To load a file in the default Turbo Board drive and folder simply enter the file name. If the file is in a sub-directory off the default Turbo Board directory you may enter just the sub-directory and file name. For example if you desired to edit the file DB001.000 located on the default drive in the folder IBM, which itself was located in the default BBS directory, you could enter IBM\DB001.00, instead of the complete path name of C:\BBS\IBM\DB001.000 (assuming drive C was your default drive - the one Turbo Board was run from). The same commands available in the message base may be used. (See Entering Messages in the Message Base section for details)

Note: The message editor may not be accessed if a user is online and is in either the E-mail, F-mail, or Message base system.

L - Type / Print System Log

If you have the log going to file (log to disk on), you may type the log file using the L command. After typing the log to screen, Turbo Board will ask if you wish the log to be printed out on the printer. Then you are prompted to either reset (started new) or appended. Appended will save the old log and add the new log entries to the end. If you hit <return> at this point, the log will not be reset. If log to disk is off, an error message will be displayed advising you of this fact.

M - Mail Cleanup

E-Mail cleanup normally occurs at the Cleanup time specified in TURBO.OPT. Selecting M at the Sysop> prompt will force Turbo Board to perform an E-Mail cleanup now. E-Mail cleanup deletes any received E-Mail, and checks for E-Mail to users who are no longer in the password file (users deleted since the E-Mail was left for them) and deletes those messages too.

N - Set Time

Use the N command to reset the time and/or date. Hitting <return> on either will not update the entry.

O - Reload Option and Data Files

If you make any changes to the TURBO.OPT file or one of the data files, you may use this command to enter those changes into Turbo Board. Turbo Board normally only reads the TURBO.OPT and Data files on boot-up, so any changes would not take effect until the next boot of Turbo Board. When the O command is entered Turbo Board will read TURBO.OPT and the Data files, and display a message stating the files have been reloaded.

P - Toggle System Log to Printer

The P command will change the current "log to disk" status. This change will remain in effect until the program is re-booted, at which time the setting in TURBO.OPT will be re-instated, or until switched again by use of the P command. When off, all log data is sent to the printer.

R - Reserve System for User

If you want to reserve your board for someone in particular to call, you may specify the user name after you hit R. After you log off the board, it will not allow anyone other than the named user, access to the bbs. There is no time limit on this function, so you had better be sure this user will call!!

S - System Status

Selecting S will display the following information:

Turbo Board ST Status at 7:15 PM on Mar 29, 1990

Up since 2:56 PM on Mar 29, 1990

Current caller #	: 26147
Callers since reset	: 4
System errors	: 0
Downloads	: 15
Ascii	: 0
Xmodem	: 3
Ymodem	: 1
Ymodem g	: 0
Fmodem	: 0
SEAlink	: 1
Zmodem	: 10
Uploads	: 2
Ascii	: 0
Xmodem	: 1
Ymodem	: 1
Ymodem g	: 0
Fmodem	: 0
SEAlink	: 0
Zmodem	: 0
Data base downloads	: 1
Data base uploads	: 0

Mail messages entered	: 5
F-mail entered	: 1
F-NET messages	: 7
Messages entered	: 5
General Discussion	: 3
Atari Messages	: 0
IBM Messages	: 2

Note: Any system errors will be logged to the system log. System errors are caused when Turbo Board can not find or write to a file it needs.
This information is automatically sent to the system log when Turbo Board is terminated using the DOS command.

T - Give User More Time

You may allocate more time for the current user, for this call only, by using the T command. Turbo Board will ask you to enter the new time limit in minutes. Remember, this is only for the current call. To permanently modify the user's call time limit you must modify his password file using the U or V commands.
You can also use the Up and Down Arrow keys to give a user more or less time on the system. The time Limit display on the top line shows the number of minutes that a user has left on your system. If you lower his time to zero, he will be logged off the system.

U - Set User Data

The U command allows you to view and modify the current user's password data file entry. When U is selected you will see an entry in the format:

John Miller <Yellowbeard>
1580 Liveoak Dr., Mississauga, ON L5E 2X6

Record/Mask	: 0/99	Password: 12345678	
Phone	: 416-274-1225	Account :	
Computer	: Atari ST	Birth Date	: May 6,1941
Calls	: 436	Age	: 50
First call date	: Aug 23,1990	Last call date	: May 11,1991
Downloads	: 15	Uploads	: 54
Bytes Downloaded	: 615217	Bytes Uploaded	: 1076950
Messages entered	: 891	Mail messages entered	: 1002
Data base files received	: 65	Data base files uploaded	: 0
Access level (Dl/Dbase)	: 32767/32767	Month connect time	: 109
Call time limit	: 255	Daily call limit	: 255
Daily time limit	: 255	Daily calls remaining	: 255
Upload limit	: 255	Download limit	: 255
Data base upload limit	: 255	Data base download limit	: 255
Daily mail limit	: 255	Daily message limit	: 255
FNET access level	: 255	Daily FNET message limit	: 255
Upload/Download Ratio	: 255	Byte Up/Dl Ratio	: 255
Call ARCDL limit	: 255	Last call was 1 days ago	

PW (?=List)>

Password Editor Commands

To see the list of PW (password) commands enter a question mark or a 'bare' <Return>.

(A) = Set privileges
(B) = Set message base privileges
(C) = Set command functions
(D) = Set user functions
(E) = Set file edit functions
(F) = Set Sysop command functions
(G) = Set limits
(H) = Set name and handle
(I) = Set password
(J) = Set phone number
(K) = Set birth date
(L) = Set address
(M) = Set account number
(N) = Set database access level
(O) = Set download access level
(P) = Set upload/download ratio
(R) = Set Kilo-byte up/dl ratio
(S) = Set download directory access
(T) = Edit upload counter
(U) = Edit download counter
(V) = Edit bytes uploaded
(W) = Edit bytes downloaded
(Y) = Display high messages read
(!) = Delete user
(X) = Exit/Continue
(Q) = Quit/Abort edit

($) = Save this profile as a mask
(SPACE) = Redisplay profile
To validate user with a defined mask, enter the mask number

PW (?=List)>

As you can see, there is a LOT of control over a user's access to the system. If you were forced to spend your time individually setting the accesses available to each individual user, you would have little time to do anything else! Luckily Turbo Board takes care of this by allowing you to pre-set up to 100 different commonly used access 'masks' that may be used to set all the user's parameters with one command. This will be covered in the section on Validation masks, for now we will just cover how to set the individual items and what they mean.

Global Set Commands

Previously we mentioned command stacking when you are using the bbs as a user. You may also command stack when setting access and privileges, (ie. 1/2/3/4/5 would toggle the first 5 privileges when setting privileges)

In the password editor you may also use the following commands to help you set the access and privileges:

SET - Set all to YES or ON
CLEAR - Set all to NO or OFF
TOGGLE - Toggle or invert present settings

System Privileges

Throughout the documentation to Turbo Board we have been giving the "privileges" required for certain operations. The A command at the PW> prompt allows you to set those privileges.

When A is selected you will be asked if you would like to set Extended Privileges, for now just hit return to see the list of list of first 32 privileges available in Turbo Board. We will go into the Extended Privileges later.

1) SYSOP_P - This is a double check on the use of the $ command at the main menu prompt. A user must have both the SYSOP_P privilege and the ability to use the $ for the user to enter sysop mode.

2) SYSUSR_P - A user with this privilege may enter a message addressed to SYSUSR:x, as explained in the message base section under SYSUSR messages.

3) ANON_P - Controls whether a user may enter an anonymous message in the regular (non-Email) message bases.

4) PRINT_P - If YES a user may send a message from the message base to the system printer.

5) RMESS_P - Allows a user to read any locked message in the regular messages bases they have access to. (Note: not E-Mail messages)

6) RMAIL_P - Allows a user to read any E-Mail message.

7) FANON_P - If YES the user will be allowed to enter the F command when reading messages sent anonymously in order to find out the name of the sender.

8) TANON_P - Allows a user to find out the addressee of a message sent to an anonymous message. (A message replying to an anonymous message.)

9) BTIME_P - Allows a user to bypass the call time limit on all calls.

10) CTRLC_P - Normally text files (menus, database files, etc) are abortable by the user by pressing <Control> C. Text files may be made non-abortable as explained in Chapter 7, Customizing Turbo Board. This privilege will allow the user to abort even those files that have the "non-abortable" code.

11) RATIO_P - Allows a user to bypass the Upload/Download file ratio if the ratio is set ON in TURBO.OPT.

12) FMAIL_P - When a user selects to send F-Mail to another user they are normally required to upload the file. The FMAIL_P allows a user to instead enter the complete path name of a current file on the system and have that copied into the F-Mail folder and sent to the addressee of the F-Mail message.

13) MSGTO_P - Allows user to use the /MT command in the message editor to change the message addressee.

14) MSGSUB_P - Controls the ability to use the /MS command in the message editor - the ability to change the message's subject.

15) DELM_P - If Yes a user may delete any message in the message bases.

16) EDMESS_P - Allows a user to edit any message in the system by using the E command at the Read Msg Cmd> prompt.

17) SYSMSG_P - If this privilege is on (YES), then when saving a message the user will be asked if the message is to be saved as a system message. System messages are not deleted automatically by Turbo Board when the message base fills up. They must be manually deleted.

18) EDOMSG_P - Allows a user to edit messages they have left after the message has been saved. A good privilege to allow your users.

19) EXCLIM_P - If YES a user may exceed the daily call limit, in effect having no daily call limit.

20) MAISAV_P - Allows a user to save an E-Mail message from being deleted automatically after it is read and the user logs off, or at E-Mail cleanup time, depending on the setting of TURBO.OPT's EMAIL DELETE line.

21) AN_MAI_P - Allows a user to send E-Mail anonymously.

22) CPMSG_P - Will allow the user to copy a message from one message base to another. The message will not be deleted on the original message base after being copied.

23) NETMAIL_P - A user may not send a message to the Fnet system unless this privilege is YES. This can also be used to send Fido mail if used in conjunction with a program called FIFO, (see FIDO Mailer for more info)

24) LOCMAIL_P - Allows a message entered for the Fnet system to be retained in the message base after it has been delivered. If the user does not have this privilege the message will be deleted after it is sent. If the user does have this privilege they will be asked if they wish to save the message locally.

25) NETALL_P - Controls the user's ability to send a single message to ALL the Fnet nodes the BBS is communicating with.

26) NET_SAVE_P - If YES, a user will have the option when reading messages of re-addressing the message as an Fnet message. The command used to re-address the message is the $ command at the Read Msg Cmd prompt.

27) NET_FILE_P - If YES, a user will have the privilege of being able to send Fmail files through the Fnet system. Normally Fmail may only be left locally by a user.

28) LOCK_MSG_P - If YES, a user will be able to lock or make private any message on the message bases, and also be able to unlock any message.

29) RM_FILE_P - If YES, a user may only remove a file that he has previously uploaded. If the User also has SYSOP_P set to YES, he will be able to delete ANY file in the file areas.

30) CRASH_MAIL_P - This privilege allows a user to send "Crash" or rush mail in the FIDOnet network, if used in conjunction with FIFO (see FIDO Disk)

31) MLIST_P - This privilege allows a user to send to a list of people or Fnet nodes using a text file. This text file can either contain a list of Fnet node numbers or full names of current bbs users on your bbs.

32) CONFMAIL_P - This privilege allows a user to send Conference F-Mail on regular or Crossnet message bases.

To change a user's privilege enter the number of the privilege. The numbers may be stacked, separated by the back slash. So to change privilege numbers 2, 3 and 18 enter 2/3/18 at the "Enter Privilege Number:" prompt.

When finished making changes to the user's privileges, press a 'bare' <Return>. This will return you to the PW> prompt.

Extended Privileges

PW (?=List)> a

Set Extended Privileges? YES

1) HANDLE_P	: YES	2) FILE_ED_P	: YES
3) FREE_DL_P	: YES	4) SFREE_DL_P	: YES
5) ALIAS_UL_P	: YES	6) BATCH_UL_P	: YES
7) COPY_TYPE_P	: YES	8) DB_SYSOP_P	: YES
9) GREET_P	: YES	10) INCLUDE_P	: YES
11) STRIP_INC_P	: YES		

Enter Privilege Number:

These are the new extended privileges in Version 2. They are as follows:

1) HANDLE_P - Allow User to change his own handle after initial logon

2) FILE_ED_P - Allow User access to File Edit menu

3) FREE_DL_P - Allow User to DL "Free Download" files at no ratio charge

4) SFREE_DL_P - Allow User to set the "Free Download" flag when uploading

5) ALIAS_UL - Allow User to optionally use his Handle when Uploading

6) BATCH_UL - Allow User to Batch upload files

7) COPY_TYPE_P - Allow User to copy a "typed" file to destination file

8) DB_SYSOP_P - Allow User Access to Sysop commands in Data base

9) GREET_P - Allow User to leave a "greeting" message at logoff

10) INCLUDE_P - Allow User to include original message in a reply

11) STRIP_INC_P - Overrides Strip included reply feature (double quoted replies)

There is still room for up to 32 extended privileges, so if you have any suggestions for a user privilege that may not be here, let us know your idea.

Set Message base / Confmail Access

Command B is used to set which message bases (besides E-Mail) the user will be able to read. If the user does not have the ability to read messages on a base then they will not see that base listed at all when entering the message system.
In addition, the Conference Fmail Access may also be set here for each base. Turbo Board may have up to 64 message bases, but only the bases that are presently used by the system will be shown.

```
PW (?=List)> b

(A)  Set read message bases
(B)  Set enter message bases
(C)  Set Confmail upload bases
(D)  Set Confmail download bases

Select> a

 1)  F-NET and BBS News        : YES    2)  Base 2 not in use          : NO
 3)  GamePlayer'sConference YES         4)  Turbo Board Tech Support   : YES
 5)  Atari C Programming       : YES    6)  Base 6 not in use          : NO
 7)  Turbo Board Sysops        : YES    8)  NEW World Sysop Conference : YES
 9)  AUA Conference            : YES   10)  ST-Report Conference       : YES
11)  Atari 16/32 Conference    : YES   12)  For Sale Conference        : YES
13)  Spectre-GCR Conference: YES       14)  Sex Conference             : YES
15)  NeST                      : YES   16)  Binkley Support            : YES
17)  Crossnet Support          : YES

Enter Read Message Base Number:
```

Set BBS Main Functions

The user's ability to enter each command, has its access controlled by the SysOp. This is controlled by setting the applicable system command function using PW> command C. This section also allows control over some of the file and data base functions. Please keep in mind that the actual command letter may be different depending on the letter you select for each function when you set up the MENU.DAT file in TSysgen.

When C is selected at the PW prompt you will be shown a listing of all the main system command functions (A, B, C, D, E, ...) with the current status (YES/NO). If Yes, the user will be able to use that system function, if No the user will be told he does not have the privilege for the requested operation.

PW (?=List)> c

1)	A	: YES	2)	B	: YES
3)	C	: YES	4)	D	: YES
5)	E	: YES	6)	F	: YES
7)	I	: YES	8)	J	: YES
9)	K	: YES	10)	L	: YES
11)	M	: YES	12)	N	: YES
13)	O	: YES	14)	P	: YES
15)	Q	: YES	16)	R	: YES
17)	U	: YES	18)	V	: YES
19)	W	: YES	20)	X	: YES
21)	Y	: YES	22)	D/U	: YES
23)	D/D	: YES	24)	F/(L,S,W,X)	: YES
25)	F/(B,D,M)	: YES	26)	F/U	: YES

Enter Function Number:

In this list are five "commands" that deal with the file and data base sections. They are:

22) DU - If YES a user may upload files to the data bases they can access.

23) DD - Must be YES to allow a user to download (read) data base files. Note: the ability to enter the database area is controlled by the D setting (item 4 in this menu), but they must also have the DD command privilege in order to see the data base files.

24) F/(L,S,W,X) - This controls whether a user may obtain a listing of the files on the BBS. If NO they may not use the L, S or W commands when in the file section. This also controls the X batch upload update function.

25) F(B,D,M) - Must be YES for a user to be able to download a file.

26) FU - If YES the user will be able to upload files to the file area.

User Bit Settings

PW (?=List)> d

1)	TIME ON	: YES	2)	CONT SCROLL MSG	: NO
3)	CLR SCREEN	: NO	4)	WORD WRAP	: YES
5)	FORCE EMAIL READ	: YES	6)	EDIT LINE NUMBERS	: YES
7)	CALL BACK CODE	: NO	8)	40 COLUMN MODE	: NO
9)	LOCAL NO WINDOW	: YES	10)	CONT SCROLL FILES	: NO
11)	DOWNLOAD DATABASE	: NO	12)	NO EDITOR HELP	: YES
13)	PAGED OUTPUT	: YES	14)	EDITOR PROMPT	: YES

Enter USR Number:

Usr functions are generally those settings the user may make himself to customize Turbo Board, such as word wrap on/off, clear screen on/off, etc. There are two usr functions however that are controlled by the SysOp.

When E is selected at the PW prompt you will be shown the current usr settings. You may then toggle any of the settings by entering the number of the usr function. The usr functions are:

1) TIME ON - If YES the time on the system will be displayed when the main menu command is displayed.

2) CONT SCROLL MSG - NO will have Turbo Board stop after each message is displayed and present the Read Msg Cmd prompt. YES means the messages will be displayed continuously.

3) CLR SCREEN - If YES, then before displaying a menu, message or file listing the clear screen code will be sent to the user. Note: The code sent depends on the user's terminal type, selected at initial (new user) log on or by use of the * command at the main menu.

4) WORD WRAP - YES enables word wrap whenever the Turbo Board message editor is used.

5) FORCE EMAIL READ - If YES, then the user will be forced to the Email Read prompt if he has either Email or Fmail waiting, when he first logs on.

6) EDIT LINE NUMBERS - If YES then line numbers will be displayed when in the Turbo Board message editor.

7) CALL BACK CODE - This is a SysOp controlled setting. If YES then the main menu command R (Ringback) will use the RINGBACK DIALING COMMAND (LONG DISTANCE) in TURBO.OPT, if NO the RINGBACK DIALING COMMAND (LOCAL CALL) is used. These settings in TURBO.OPT are the commands prefixed to the user's phone number when the user is called back by the BBS.

8) 40 COLUMN MODE - YES means the user selected his terminal width setting as

40 columns when initially logging on, or by use of the * command at the main menu. Note: The only effect the 40 column screen width currently has in Turbo Board is the operation of the message editor when entering messages.

9) LOCAL NO WINDOW - This is a SysOp controlled setting. Normally Turbo Board maintains the status lines at the top of the display at all times. If LOCAL NO WINDOW is set YES, then when this user logs on in local mode (by pressing <Return> on the BBS computer itself, not by calling in), then the status window (top 5 lines of the display) will disappear so the whole screen may be used.

10) CONT SCROLL FILES - If YES, then the file listings will be displayed without pauses and without the List Cmd prompt after each file.

11) DOWNLOAD DATABASE - If YES, then the user will be shown the download protocols when he wants to view a database file. If no, the user will view the files normally.

12) NO EDITOR HELP - If YES, the user will not be shown the initial message editor command summary file.

13) PAGED OUTPUT - If YES, the user will see the * More? (Y/N/C) prompt and the paging mode will be turned on.

14) EDITOR PROMPT - If YES, the Quick Edit Prompt when in the message editor, is enabled. Simply hit two carriage returns on blank lines to display it.

When finished modifying the usr functions press a bare <Return> to return to the PW> prompt.

File Editor Menu

You may also limit the number of Edit options a user may have available if they have been given the File Edit privilege.

PW (?=List)> e

1)	A	: YES	2)	C	: YES
3)	D	: YES	4)	E	: YES
5)	F	: YES	6)	L	: YES
7)	M	: YES	8)	N	: YES
9)	R	: YES	10)	T	: YES
11)	U	: YES	12)	W	: YES

Enter File Editor Function Number:

Sysop Mode Functions

All of the Sysop mode functions have now been bitmapped so you may give a user partial Sysop access. It is recommended that you do not give a user access to the U or V password edit functions or they will be able to update themselves for full sysop access in the password editor. Command F will display the following menu:

PW (?=List)> f

1)	A	: YES	2)	B	: YES
3)	C	: YES	4)	D	: YES
5)	E	: YES	6)	F	: YES
7)	G	: YES	8)	H	: YES
9)	I	: YES	10)	L	: YES
11)	M	: YES	12)	N	: YES
13)	O	: YES	14)	P	: YES
15)	R	: YES	16)	S	: YES
17)	T	: YES	18)	U	: YES
19)	V	: YES	20)	Y	: YES
21)	Z	: YES	22)	DOS	: YES
23)	>	: YES			

Enter Sysop Function Number:

User Limits

All of the User limits are grouped in this sub menu for easier use.
Command G will show you the user limits submenu:

PW (?=List)> g

(A) Set daily call limit
(B) Set daily upload limit
(C) Set daily download limit
(D) Set daily db upload limit
(E) Set daily db download limit
(F) Set daily enter email limit
(G) Set daily enter message limit
(H) Set daily FNET mail limit/access
(I) Set daily time limit
(J) Set call time limit
(K) Set call ARCDL limit

Select>

Daily call limit is the number of times a user may log on your bbs per day.

Daily upload and download refers to the number of times a user may upload and download using the file protocols. Please note that system functions F/(B,D,M) must be On for a user to download, and F/U be On for a user to upload. The F/(L,S,W,X) must be on just so a user may access the file system to view the files.

Note: If the USE UL/DL RATIO is active in TURBO.OPT, then the user must also be within the Upload to Download ratio in order to download a file.

Db is short for Database and it is the limits on viewing files in the Database per day and also uploading database files. The System commands D/D and D/U also will restrict uploading and downloading.

Notice that Email (private message system) and regular message enter limits are separate.

The FNET mail limit and access is a dual function, setting mail limits and separate FNET access levels. Please refer to the FMAILER.DOC for more information.

Daily time limit is the total time limit for a day, the call time is per call. If you make the call time limit greater than the daily limit, the system will use the daily limit for both limits.

The Call ARCDL or Arc Tools limit is the number of times a user may place a file in one of the ARCDL.ARC or LZHDL.LZH files before downloading.

All of these limits are per day, with the exception of call time limit.

Set User Name and Handle

Allows you to change a user's name. Most useful when a user enters their full name when requested to enter their FIRST name, and then enters their last name again when requested to enter their LAST name. Also allows you to change a user's name if the you allow 'handles' and the user requests you change his current system name.

We have tried to make a new convention when you edit fields in the pass editor. Whenever you see a setting in brackets, ie. (John Miller), you will not change that field if you merely hit the enter key, the original information will be retained. The following commands will illustrate the various prompts found for the editor commands.

PW (?=List)> h

Enter new name (John Miller):

Enter new BBS Handle (Yellowbeard):

Set Password

Allows you, the SysOp, to modify a user's password. The user may also accomplish this if granted the N system function, Change Password.

PW (?=List)> i

Enter new password (12345678):

Set Phone Number

PW (?=List)> j

Enter new phone number (416-274-1225):

Set Birth Date

PW (?=List)> k

Enter new Birth Date (mm-dd-yy):

Change address

This option allows you to change the user's street, city, state and zip code entries in the profile.

PW (?=List)> l

Street address:

City:

State:

Zip:

Set Account Number

The account number is not used by Turbo Board, but may be requested of new users by turning ACCOUNT NUMBERS on in TURBO.OPT. When ACCOUNT NUMBERS is ON in TURBO.OPT, new users will be shown the file ACCNUM.TXT during their initial logon. You should specify in this file what number you want them to enter (SSN, user group member number, etc.) at the account number prompt. The F command allows you to change the user's account number.

PW (?=List)> m

Enter new account number:

Set database access level

Set database access level is separate and unique from the file access level set with the L command. This access level only controls access to the different (if you use multiple) databases.

PW (?=List)> n

Enter new database access level (32767):

Set Download Access Level

This is probably the user's most important setting. The download level controls what files access level the user will be allowed to see. It also controls the Messages received that are sent Locked and addressed to SYUSR:x, as well as used in performing mass mask number changes using the SysOp V command. Enter the users file download access level at the prompt.

PW (?=List)> o

Enter new download access level (32767):

File Ratio Limits

Turbo Board uses a combined Upload/Download file ratio, based on both numbers of files uploaded and downloaded, and the number of bytes uploaded or downloaded Set the # of files and bytes to NN:1 where NN is the number that you want your ratio, ie 10:1 is a ten to one ratio, whether it be bytes or files. Usually it is best to set the byte ratio high, as this will usually be high for most users.

PW (?=List)> p

Enter new upload/download ratio (5):

PW (?=List)> r

Enter new Kilo-byte up/dl ratio (20):

Set Download Directory Access

Entering a S will display a sub-menu listing the twenty download directories by number (no name displayed) and allow you to set which file areas the user has access to. Note: This does not change the text file shown when the user enters the file area. They will still see the file areas shown in the text file FILES.TXT, even if it lists file areas they do not have access to.

PW (?=List)> s

1) STFILES	: YES	2) PCFILES	: YES
3) SYSOP	: YES	4) TURBO	: YES
5) UPLOAD	: YES	6) not installed	: NO
7) not installed	: NO	8) not installed	: NO
9) not installed	: NO	10) not installed	: NO
11) not installed	: NO	12) not installed	: NO
13) not installed	: NO	14) not installed	: NO
15) not installed	: NO	16) not installed	: NO
17) not installed	: NO	18) not installed	: NO
19) not installed	: NO	20) not installed	: NO

Enter DL Directory Number:

Edit Upload/Download Counters

All the Upload and download counters may be edited by the Sysop.

PW (?=List)> t

Enter new upload count (54):

PW (?=List)> u

Enter new download count (15):

PW (?=List)> v

Enter new bytes uploaded (1076950):

PW (?=List)> w

Enter new bytes downloaded (615217):

High Message Read

Please notice that if you are using the SIG method of grouping message bases, that the high message read will reflect those numbers instead of the actual base numbers where you set the Read and Write privs, and the Confmail privs. The message base names are the same in any respect, so go by that when you are setting up the user's access.

PW (?=List)> y

High message read on:

SIG 1 - Turbo Board ST Support:	
1 - Turbo Board Tech Support	: 21994
2 - Turbo Board Sysops	: 2615
3 - NEW World Sysop Conference	: 438
SIG 2 - Atari Programming Area:	
1 - Atari C Programming	: 474
SIG 3 - Atari ST Information Area:	
1 - AUA Conference	: 59
2 - Atari 16/32 Conference	: 8147
3 - Spectre-GCR Conference	: 797
4 - ST-Report Conference	: 3852
SIG 4 - General Topics Area:	
1 - F-NET and BBS News	: 673
2 - Game Player's Conference	: 6971

3 - For Sale Conference	: 4270
4 - Sex Conference	: 4111

SIG 5 - Sysop Support:

1 - Turbo Board Sysops	: 2615
2 - NEW World Sysop Conference	: 438
3 - Crossnet Support	: 406
4 - Binkley Support	: 701
5 - NeST	: 426

To save the current user's profile as a validate mask (see the Validation Mask section) enter the $ character. You will be asked for the mask number (0-99) to save the profile as. TSysgen automatically creates the 0 mask for a new user, and the 99 mask for the Sysop.

To redisplay the current user's profile hit (Space) and (Return).

To exit the PW> prompt and return to the main SysOp menu without saving the modified profile, type Q and (Return). To exit and save the modified profile enter an X and (Return).

V - Validate Passwords

This is the main method of performing maintenance on your password file. The U command only displays and lets you modify the current user. The V command allows you to modify any user record.

When the V command is entered you will see a sub-menu of:

Sysop User Validate Menu

(A) - New Users
(B) - Autodelete inactive users
(C) - Search Name/Handle
(D) - Search Password
(E) - Search Record Number
(F) - Search Access level
(G) - Search mask number
(H) - Set all users at access level x to mask number y
(I) - Set all users at mask number x to mask number y
(J) - List users
(K) - Undelete user by record number
(L) - Show/Undelete deleted users
(M) - General Edit
(Q) - Exit

Select>

A - New Users

This command option will search the password file and display each user with a file access level of 0. The information displayed and the options available are then the same as when the U command at the Sysop> prompt is used.

B - Autodelete inactive users

After entering option 2 you will be asked:

Delete after how many days of nonuse <30>:

If a bare <Return> is entered the system will default to 30 days. You may enter a value at this prompt instead of using the default 30 days.

Next Turbo Board will display:

Enter Bypass Level <0>:

The bypass level allows you to skip users at or above the specified (file) access level when deleting users. The default is level 0, which means the autodelete will skip all users. If you want the autodelete to look at all users, enter 32767. Turbo Board will display each user deleted - giving the name, password, phone number and the date last called. Before beginning the actual delete it will ask you where to direct this information, to the screen, log (printer) or both.

Example: You wish to delete all users with a file access level below 10 who have not called in the last 60 days, but retain all users with a file access level at or above 10 no matter when their last call was. Enter 2 at the Select> prompt to chose Autodelete inactive users, then enter 60 at the "Delete after how many days of nonuse" prompt, and finally, enter 10 at the Bypass Level.

C D E F G - Search Options

These options allow you to search for a matching string in the name, password, record number, file access level, or mask number fields. If C or D are chosen you will be asked to "Enter search string:". This is similar to searching for a user name when entering messages, in that you may enter just a part of the full name or password, and Turbo Board will show you all the names or passwords that contain your search string.

Search Name Example: To locate the user record for a user named John Smith, you would enter C at the Select> prompt, then you could enter John Sm as the search string. Turbo Board would stop at every name that contained the string "JOHN SM". This means it would stop at "John Smith", and also "Little-John Smart", and any other names with the included string. To narrow the search as much as possible enter the full name. Turbo Board will also search the Handle fields if you cannot remember the real name, but only the handle. The search on the ID (password) works similarly.

The record number for each user is output to the system log when the user logs on. When looking at the log this is the number in parenthesis immediately following the

name of the caller. The record number entered to search for will be the only record displayed. Access Level will search for all users at a particular access level. Mask number will search for all mask numbers matching the number entered.

H - Set all users at access level x to mask number y

This is an easy way to update your user settings without having to modify each user individually. When this option is selected Turbo Board will ask you to "Enter Access Level of users to search:" Enter the file access level for Turbo Board to search for. Next Turbo Board will ask you to "Enter mask number to change users to (0-99):" Enter the appropriate mask number and press <Return>. Each user that is modified will be displayed on the screen. (See the Validation Masks section for details on the use of masks.)

Example: You have your users set to not allow the use of the R function as you did not wish to use Ringback. You now wish to try it out for higher access users would like to enable all your 1000 level users the function. Rather than changing each user's profile (ugh!) you use the ability to do a mass change of the profiles using the H sub-command of the V Sysop command. First modify your old mask to allow the use of the R command (see Validation Masks), then after selecting H enter the file access level (1000) associated with that mask. The last step is to enter the corrected mask number and sit back while Turbo Board does the work.

I - Set all users at mask number x to mask number y

This command works the same as the preceding one, but the mask number is used as the search criteria instead of the access level.

J - List Users

This command will display all users, showing the record number, name, phone number, computer type and password. The output may be directed to the screen, the system log, or both.

K - Undelete User

To undelete a user you must know the record number the user's profile was stored in. After selecting K, Undelete user, Turbo Board will ask "Enter search record number:". After entering the record number Turbo Board will undelete the user if it is a deleted password. If the record number does not contain a deleted profile it will alert you of that fact.

L - Show/Undelete deleted users

Using the K command by itself is a hit or miss affair, so you may search out deleted passwords on your system with the L command. You also have the choice to undelete passwords with this command as they are searched out.

M - General Edit

A general edit will ask first for you to "Enter beginning record number to edit:" Every user record starting at the entered record number will be displayed.

Note: To abort any of the searches, or the General edit, enter the * character at the PW> prompt. This will return you to the Validate passwords sub-menu.

Exit Validate Menu

Hitting Q or X will exit this submenu to the Sysop menu.

X - Exit Sysop Mode

Pressing X and then <Return> will exit you from Sysop mode. If a user is on the system control will be returned to him/her. If there is no user on the system the modem control line will be restored to the normal (high) level so the modem will accept calls.

Note: The Q key may also be used to exit the SysOp mode. This command is not shown in the SysOp menu.

Y - Toggle Page Mode

You may change the current setting of chat by using the Y command in the Sysop mode. When chat is on that status screen will display Page On. If off the status screen will display Page Off. Note: When page is on the actual status is controlled by the CHAT ON TIME and CHAT OFF TIMES in the TURBO.OPT file.

Z - Delete Received Messages

All locked messages on a message base that have been received by the addressee may be deleted by use of the Z command. You will be asked to enter the number of the message base you wish to have this operation performed on.

DOS - Typing DOS at the Sysop> prompt will terminate the running of Turbo Board. Before ending Turbo Board will print the system status to the system log, the same status information as shown when the S command is issued at the Sysop> prompt.

> - End run of Turbo Board. This command is a rapid way of exiting Turbo Board. No system status will be sent to the system log if the > command is used.

<Control>-<Alternate>-K

You may also "Kill" turbo Board using <Control>-<Alternate>-K to end the operation of the board from ANYWHERE in the System

<Alternate>-D

Alternate D will send you into the DOS Shell. If a user is online, he will "frozen" out until you exit the shell.

<Control>-D

Control D will send you into the DOS shell and if a user is online, he will also be sent into the Shell.

<Esc>

Hitting <Escape> while a user is online will send you directly into Chat mode with that user. Make sure that the Snoop mode is enabled.

Validation Masks

As stated previously, if you had to individually set all the parameters available for each user, you would spend far too much time validating users and have no time to enjoy your BBS! Turbo Board provides a quick and easy way to set your user profiles, but it does take some planning and record keeping on your part.

The way this works is you set up a single user's profile (all the settings available in the SysOp section for modifying a user's parameters, using either the U or V commands at the Sysop> prompt) as you would like a group of users to be. You then 'save' this profile as a 'validation mask', to be overlayed on the other user profiles in a single step operation. To save a user's settings as a validation mask, use the $ command at the PW> prompt. You will be asked to enter the number of the mask to save the profile as.

Once you have your profiles set up, then when validating new users or upgrading the status of a user, you simply enter the number of the validation mask you wish to change that user to at the PW> prompt. If you only enter the mask number you will remain at the PW> prompt, and will have to exit using the X command to save the user's modified profile. To validate a user with a validation mask and have it save the modified profile and exit, append the mask number with an "e". For example, to set a user to mask 2 and exit you would type:

PW> 2e

In Chapter 12 are sample work sheets to use in setting up your masks. There are 100 available masks to use, numbered 0 to 99. Remember that mask number 99 is set up by TSYSGEN2.TOS as the SysOp mask. Also, mask number 0 is used by Turbo Board to set all user's profiles on their initial log-on. Because mask 0 is for new users you need to be careful when setting this mask. First, be sure the (file) access level is 0. If you raise the file access level for mask 0, then a new user could log on using the name ALL and delete the messages addressed to ALL. (Note: Download access level of zero flags Turbo Board that this is a non-validated user, so Turbo Board will not allow the user to delete messages.) You may also bypass this problem by not allowing mask 0 users access to the message bases. On all your masks, remember that the mass change of user profiles (using the "Set all users at access level x to mask y" in the Validate user sub-menu) is keyed to the file access level. You should have every validation mask set a different file access level to make it easy to change the proper user profiles when using this feature.

Chapter 5 - The System Generator (TSYSGEN2.TOS)

When you run TSYSGEN2.TOS you will see the following:

```
///Turbo Board ST System Generator
Ver 2.01
By Bill Miller
Copyright 1990, 1991, Bitblit Systems

A - Initialize System
B - Add a message base
C - Rename a message base
D - Delete a message base
E - Expand a message base
F - Reinitialize a message base
G - Rebuild message base IDX ISM
H - Check message base integrity
I - Change next message number
J - Expand/Compress password file
K - Reinitialize password file
L - Rebuild password IDX file
M - Delete a password entry
N - Change caller number
O - Reset high message counters
P - Add download directory
R - Remove download directory
S - System checkout
T - Set screen colours
U - SIGS compiler
V - Main menu organizer
W - Rebuild HELP.IDX file

@ - Show command line options
Q - Quit

///Turbo SysGen>
```

Turbo System Generator Commands

A - Initialize System

This command was covered in the Running SysGen section of the SETUP chapter of the manual. It performs a complete initialization of the system.

B - Add a message base

You will be asked for the name of the new message base and the number of messages to allocate space for. SysGen will create the new message base files and update the CONFIG.DAT file with the new information.

C - Rename a message base

You will be given a list of the current message bases. Enter the number of the message base you wish to rename, then the new name of the base. Message base names may be up to 40 characters long.

D - Delete a message base

Use D if you desire to delete a message base completely from the system. You will be shown a list of the current message bases and asked to select the number of the base to delete. If the message base is not the highest numbered message base, then all message bases with a higher number will automatically be shifted down one. For

example if you have three message bases, with names MESAGE1.DAT, MESAGE2.DAT and MESAGE3.DAT (and the .IDX and .ISM files also), and message base 2 is deleted, then the old message base 3 files will be message base 2 when selecting a message base within Turbo Board.

E - Expand a message base

You will be given a list of the current message bases. Enter the number of the message base you wish to expand. You will be shown the current number of messages allowed in the message base. You will then be asked for how many more messages to allow. For example, if you have a message base that currently is allocated for 50 messages and you wish to increase it to allow a total of 65 messages, you would tell SysGen to add 15 messages. (65-50=15)
If the number you enter plus the current number of messages allocated is greater than the 500 message limit that Turbo Board allows, then SysGen will automatically set the new number of allowed messages to 500. SysGen will then search for the appropriate message files, expand them and update the system configuration file (CONFIG.DAT).

Note: No check is made for the amount of free space on the disk where the file to be expanded resides. If there is not enough space the system will crash and the message base MUST be reinitialized, erasing all the old messages.

F - Reinitialize 1 message base

If one of your message bases becomes too corrupted to be repaired using option G of SysGen, then you may completely rebuild the message base using the F command. All messages will be erased and the message base will be started fresh. When F is selected you will be shown a list of the names of the current message bases and asked to enter the number of the message base to reinitialize. As this is a complete rebuild of the base, you will be asked for the name to use and the number of messages for the 'new' message base. This is also the only way to reduce the size of an existing message base. (All current messages will be lost however.) To expand the size of a message base use the E command.

G - Rebuild message base IDX ISM

If you select option G, SysGen will show you a list of the message bases on the system and you can select the base that you wish to rebuild. This option will not repair a corrupted DAT file. If this is the case, you must use option F to reinitialize the message base. You may also rebuild ALL bases, and this function can also be run from the command line in Tsysgen, so you can perform this function from a batch file.

H - Check message base integrity

This option will perform many checks on the message base you select and make sure that no problems exist within the structure of the message base.

I - Change next message number

This function will change the next message number in any message base.

J - Expand/Compress password file

This function will either Expand or Compress your password file. You will first be shown the number of valid passwords on your system and the present total number of passwords available on your system. If you wish to expand the password file, you will be asked for the number of additional passwords to allocate space for. If the current number of passwords plus the additional number of passwords exceeds the system maximum of 2,000 then the total will be set to 2,000. If you wish to compress your password file, you may only compress the file to the actual number of valid passwords presently on your system. In both cases, the IDX file will also be rebuilt.

K - Reinitialize password file

If your password file becomes corrupted so bad that neither rebuilding the index nor wiping selected bad passwords will 'fix' it, you will have to reinitialize the file. This will erase all your user data and all users will have to re-apply for a password.

L - Rebuild password IDX file

This option reads the password data file (TPAS.DAT) and recreates the index file (TPAS.IDX). Use this when you are having difficulties with your password file.
You may also use this function to Undelete all deleted password records within the TPAS.DAT file incase you made a mistake when deleting users. (Believe me, it can happen...)

M - Delete password entry

The M command is used when you have a corrupted password file, such that when editing the user profiles the system will crash when it attempts to read a particular password. If this happens to you, determine the exact password record number the error occurs at. Then execute Tsysgen and select the M command. Tsysgen will ask for the record number to erase and completely 'wipe' that record clean. The user that had their profile stored there will, of course, have to re-apply as a new user.

N - Change caller number

The N command will display the next caller number Turbo Board will assign, and ask you to enter the new 'next' caller number to use.

O - Reset high message counters

This function will reset all users high message read counters back to zero.

P - Add download directory

This function allows you to add additional folders to be accessed by the Turbo Board files system. You will be asked for the new folder name. Turbo Board will create this new folder on all drives that are specified in the TURBO.OPT file and initialize the new DIR files.

Note: You must also modify your FILES.TXT file to include the new file area. Don't forget to check/modify the user's access settings for the download directories. (Command Y when examining user profiles in SysOp mode.)

R - Remove download directory

You will be shown the names of the current download directories (the folder names). Enter the number of the directory you wish to remove from system access. This will not delete the folder(s) themselves, you must perform that operation manually if you desire to delete the physical files and folders.

S - System checkout

If you have made any changes to TURBO.OPT since you initialized the board, (ie. adding new drives), run this option, and it will perform a check, making sure that all directories are on all needed drives, and that the drives listed in the OPT file actually do exist.

T - Set Screen Colours

Turbo Board gives you an option to set the screen colours using the TOS colours stored in the Desktop.inf file. However if you have never set up your screen colours with the control.acc and saved the desktop, you will see a black screen when you boot Turbo Board. To evade this unfortunate occurrence, you are able to set basic screen colours using this command, just make sure that you turn off the environment memory colours in the TURBO.OPT file.

U - SIGS Compiler

The operation of the SIGS compiler was previously explained in Chapter 2, Setting up Turbo Board.

V - Main Menu Organizer

Turbo Board comes standard with a main menu, and a User Utility Sub Menu. However, using this command, and creating some new text menu files, you will be able to reconfigure your main menu, and sub menus however you like them.
This is all explained in Chapter 7, Customizing Turbo Board.

W - Rebuild HELP.IDX

This function allows you to generate a new index file for the HELP.TXT file if you have edited it in any way. It must be run or your help system will not operate correctly. See Chapter 7, Customizing Turbo Board, for more details.

@ - Display Command Line Parameters

This command displays the command line parameters that you may pass to Tsysgen in a batch file. They are:

TSYSGEN Command Line Options:

G/n - Rebuild n message base number, (0 = Email, A = All bases + Email)
L - Rebuild password index file (TPAS.IDX)
U - Compile SIGS.DAT
W - Rebuild help system index file (HELP.IDX)

Q - Quit

Enter Q (or X) to exit the Tsysgen program.

Chapter 6 - Batch files

This section deals with one of the most powerful features of Turbo Board. The batch file processor that is built into the bbs will allow you to do many things, we hope to explain them here.

There may be additional programs you would like to run every day, unattended. To have Turbo Board execute these programs you must create a text file called a Batch file. Turbo Board will read each line of this file, and pass the line to the batch processor for execution. You will be able to run programs automatically, perform Dos functions, and be able to perform limited conditional statements in the batch files.

Available System Batch Files

First, a list of all the batch files that Turbo board will look for and run if they are found:

DAILY.BAT	Runs daily between 12 midnight and 2 am
FMAINT.BAT	Runs at the cleanup time specified in TURBO.OPT
FMAIL.BAT	Runs after an incoming F-Mailer has called in
HOURLY.BAT	Runs on the hour if no user is online
LOGOFF.BAT	Runs after a user logs off the system
LOGON.BAT	Will run just after a user logs onto the bbs
MONTHLY.BAT	Runs at the beginning of each month after DAILY.BAT
SURVEY.BAT	Will run instead of the Survey System if used
SYSPAS.BAT	Will run instead of the Syspas System if used
nnHOUR.BAT	Specified Hour batch file where n = 00 - 23

Day of the Week Batch files run after DAILY.BAT:

SUN.BAT	Sunday batch
MON.BAT	Monday batch
TUE.BAT	Tuesday batch
WED.BAT	Wednesday batch
THU.BAT	Thursday batch
FRI.BAT	Friday batch
SAT.BAT	Saturday batch

Turbo Board also has a Batch file subdirectory, and you should place all the batch files that you use in this subdir. (See TURBO.OPT). These are the batch files that Turbo Board will use for day to day functions.

SURVEY.BAT is an optional batch file, and will run instead of the normal survey system in Turbo Board. If SURVEY.BAT is found, the board will execute it, but first will write to disk the TURBO.DAT file and the DORINFO1.DAT file. The board will also pass a number to SURVEY.BAT, 0 for new user survey, 1 for survey 1, 2 for survey 2, etc. When writing the SURVEY.BAT file, the number passed to this batch file will be parameter %1.

Fido batch files

If you would like to run the Fido Binkley Mailer, you will need other batch files for that purpose. We will not go into setting up the Binkley Mailer, as that is quite involved. We will explain the special Batch files that are used only in conjunction with the Binkley mailer. We have included a FIDONET disk in your package, that contains the various FIDO utilities and the Binkley mailer that run with Turbo Board, if you wish to set up the FIDO mail system.

AUTOEXEC.BAT Runs when Turbo Board is initialized to set environment memory strings needed by the Binkley mailer.

FIDOMAIL.BAT Runs after LOGOFF.BAT and used in conjunction with the Binkley mailer. This batch file contains the name of the main Binkley batch file or can be the main Binkley batch if you prefer.

BBSBATCH.BAT This batch file is created by the Binkley mailer and contains the needed information used by Turbo Board, the connect rate, and time limit. This batch file MUST be copied into the batch subdirectory for Turbo Board to find it. Program your batch files accordingly so this will occur.

If you are NOT using the Binkley mailer, DO NOT USE any of these batch files or you will have serious problems when running your system.

We have a complete set of Batch files available for use with the Binkley Mailer, as well as the other needed files for the Fido net system on the Turbo Support BBS and on our other satellite support boards, if you are interested in running the Fido mailer.

Programming Batch Files

Before you read this section, please read the section on the Sysop Dos Command processor (Command D from the Sysop menu) if you have not already done so.

Programming batch files is quite easy, and can become quite complicated if you like too. We will start off with the simplest form of batch file, the simple file execution. If you create a batch file and place just the name of a program in it:

c:\bbs\quoter.tos

The batch will run the program Quoter if it is called either by the bbs or if you type the name of the batch file in the Dos Command processor.

Please note that you may run ALL batch files that you make in the Command processor, ensuring that they all contain correct filenames, and pathnames. It will allow you to check out your batch files before you let them run unattended. There is nothing worse that having a batch file crash your board, and we hope to ensure this from happening, but be careful and test your batch files.

You may also add Dos commands to your batch files:

```
copy c:\bbs\config.dat a:\
copy c:\bbs\pas.* a:\
```

This batch would be useful to backup your more important BBS files.

You may also add conditions to a batch file:

```
if exist (condition) (command)
```

ie.

```
if exist a:\config.dat rename config.old
```

Batch files may also execute other batch files. As a convention, all batch files must end with a .BAT convention.

ie.

```
daily
monthly
```

Where the daily and monthly batch files would be executed by this batch. Also note that you don't always need to place the full pathname of a file. In the case of a batch file, the system will always look into the BATCH subdirectory to find it. If you are in the same directory as the file you wish to run, you also don't require the full pathname.

You may also use REM statements and LABELS in your batch files. A REM statement is just a statement that you place in a batch file for your own information. LABELS are used to break up a large batch file into smaller subsections, and are used with conditional statements. A label is always on a single line and is defined as a label by placing a colon in front of the label.

ie.

```
REM this is a label
:START
```

Labels are case sensitive in Turbo Board, so as a convention, it is best to place them all in capital letters.

You may also use ERROR LEVELS with your batch files. An ERRORLEVEL is a value returned by a program when it terminates. You can also exit a batch file with an error level if you use the EXIT nn command where nn is the value of the error level.

Using Error Levels, you could have a Batch File written as follows:

```
if errorlevel 10 goto START
if errorlevel 20 goto MIDDLE
```

```
if errorlevel 30 goto END
:START
daily
exit 15
:MIDDLE
crossnet.ttp process
exit 25
:END
exit 35
```

Usually a batch file such as the one shown will be executed by another batch file, so it can get an errorlevel from that starting batch file. We can also change the errorlevel we started with, by using the exit nn command, so we can pass information back to the originating batch file, by way of the errorlevel.

You may also pass parameters to a batch file as by way of the command line. Say you had a batch file called tempus.bat
and you called it by typing tempus turbo.doc. We have placed a parameter on the command line, and we will read it in the batch file as follows:

```
@echo off
l:
cd tempus
tempus.prg %1 %2 %3 %4
cls
```

The first two lines are standard dos commands changing the drive and directory. But if you look at the third line, you will notice that there are the %1, %2, %3, and %4 characters after tempus.prg. This is how we can pass the command line information to a batch file. Tempus is an editor that can load up to four files from a command line, and we can pass the filenames on our command line to it in this manner. Each %n character denotes one parameter in order from the originating command line. %0 is also used, but it will always contain the filename of the batch file that was called.

Using Environment Strings

An environment string is simply a user definable ascii string and variable name. An environment string is created using the SET or PATH commands. Environment strings are usually used by external programs but can be accessed from the DOS shell.
ie.
set user=Bill
path e:\tc\bin (this is the same as 'set path=e:\tc\bin')

now typing 'set' by itself displays

USER=Bill
PATH=e:\tc\bin

To change an environment string simply

set user = Billy

now typing 'set' you see

PATH=e:\tc\bin
USER=Billy

To clear ALL the environment strings type 'envclr'

To access an environment string you must place '%' sign at each end of the variable name.

eg.
set junk = %path%\%user%
set

you will see

PATH=e:\tc\bin
USER=Billy
JUNK=e:\tc\bin\Billy

The string name will be replaced by the defined string in the same way a # macro will be replaced. Also ANY environment string you define can be accessed by ANY external program run by Turbo Board. C source code has been provided to demonstrate how an external program can access environment strings. (environ.c in the PRGRMMR.LZH file)

String Comparison

Strings can be compared now in version 2. All string comparison is done without regard to case.
eg.
if %user% == bill goto label_1
if %user% == #FNAME goto label_2
if NOT billy == bob goto always_true
if #FNAME_#LNAME == visiting_sysop goto vis_sysop

System Macros

There are now a number of imbedded System Macros that can be placed in any text or batch file. They may also be used in the Environment memory for external programs. These macros will be interpreted by the system, and are the following:

#FNAME	- User's First name
#LNAME	- User's Last name
#NAME	- User's FULL name
#HANDLE	- User's Handle
#PHONE	- User's Phone number
#STREET	- User's street address
#CITY	- User's City
#STATE	- User's State
#ZIP	- User's Zip code
#BIRTHDAY	- User's birthday
#AGE	- User's Age
#PASS	- User's Password
#ACCESS	- User's access level
#LOGIN	- LOCAL or REMOTE login
#TIME_LEFT	- User's time left on system
#TIME	- Current time
#DATE	- Current date
#SYSOP	- Sysop's Name
#BBS_NAME	- BBS Name

These Macros can be used in many ways. One way is to imbed the Macro name in a bulletin, message or other Text file to "personalize" it for whomever is reading it. Please note that these macros are case sensitive and must be spelled as they are shown. You may also use these macros in a batch file. If the following line in a batch file contained:

doors.prg #NAME #ACCESS #TIME_LEFT

Assuming the User's full name was John Smith, access is 1000 and the time left was 35 minutes, the program would actually be passed:

doors.prg John Smith 1000 35

You can see that passing Macros on a command line is a very powerful function indeed.

Another useful way to use these macros is in the TOS environment memory that is passed each time an external program to the BBS is executed.

If the program can utilize environment memory, then this becomes another useful way to pass program parameters. Continuing our John Smith example:

```
set name=#NAME
set access=#ACCESS
set time=#TIME_LEFT
```

The program executed would actually receive the Environment as:

```
NAME=John Smith
ACCESS=1000
TIME=35
```

Chapter 7 - Customizing Turbo Board

The files included on your distribution disk are 'generic' Turbo Board files. You may customize your BBS by making changes to these files and by adding alternate files for Turbo Board to use. This chapter will describe in detail all of the ways that you may make Turbo Board unique to your own system.

New Menu System

Turbo Board's new Menu System is very powerful. It will allow you to program submenus, allow you to run external programs, and to rename the various system functions to your own liking.

Setup for new Menu

To create your own Menus, you must first start up TSYSGEN2.TOS and then select the Menu option. We have enclosed our own default MENU.DAT file, so you can see how this file is constructed. The edit functions are fairly well shown, so we will explain what all the commands and System Function letters represent. With Version 2, you may now have as many submenus as you like from the main menu, and you can call them via your own custom letters or stick with the standard ones that we have used. You may include system functions in submenus, and you many include the same system function in more than one submenu, depending on how you would like your system to appear to the user. The Main menu's text file that is displayed to the user, is now called MENU.TXT and should be located in your text subdirectory. All of your sub menu text files, are called what you want to call them, though we suggest that you use the TXT extension, and keep them in your text subdirectory. The prompts for each sub menu is SYSOP DEFINABLE and in the submenu TXT file, it should be on the FIRST line. Shown next is our UTILITY.TXT file for our Utility Submenu:

Utilities>

///Turbo Board Utilities

A- Add a BBS number to list
C- Chat mode (page Sysop)
D- Toggle connect time display
G- Set graphics style
H- Change BBS Handle
M- Available Macro Commands
Q- Quit to main menu
N- Make a NEW password
P- View your profile
R- Ring back (valid users)
S- Set 'clear screen' mode
T- Set terminal type/line feeds
U- User log (search list of users)

System Commands

Please note that most of the older version 1 system functions are retained internally, though you can use your own menu command letters to call them. The following list shows you the System Functions available:

A - Available Macros
B - Bulletins
C - Page Sysop for Chat
D - Database
E - Email System
F - Files System
G - Goodbye
H - Help System
I - Change Graphics Mode
J - Doors Subsystem - included for compatibility with Version 1, as it is not really needed in Version 2
K - Add BBS number to other BBS list
L - Leave Mail to Sysop
M - Message System
N - Change Password to New Password
O - Other BBS List
P - Profile
Q - Change Terminal Type
R - Ringback
S - Screen Clear
T - Time/Date Toggle
U - User log
V - Survey System
W - Change Handle
X - Fmail System
Y - Sysop Mode

Any of these functions may be in the main menu or a sub menu. It is all up to you. In our own Menu.dat file, we have many of the user related functions in a Utility sub menu.

Special System Functions

! - Execute batch file or external program
@ - Show text file
# - Sub menu entry. Prompt is defined on first line of menu text file specified in Parameter field
$ - Execute a Macro (Command stack from main menu)
% - Exit to previous menu
^ - Exit to main menu

These special characters are used instead of one of the System Functions, and will allow you to create your own custom submenus and execute external online programs from your menus.

Command Attributes

The ! function can also be used with the following attributes:

D - Write user data files (TURBO.DAT etc.)
C - Use CONTIME.DAT access (doors access)

PROMPT.TXT

When booted, Turbo Board looks for a file named "PROMPT.TXT". If this file exists it must contain the following information:

Line 1:
The BBS name

Line 2:
The system command prompt (the main menu prompt)

Line 3:
The text sent to the user when the SysOp enters SysOp mode by pressing the F1 key. (No text is sent if the F2 key is used.)

Line 4:
The text sent to the user when the SysOp enters "chat" mode.

Line 5:
The text sent to the user when the page command is off, or is on but the current time is outside of the CHAT ON to CHAT OFF times in TURBO.OPT.

Line 6:
The Sysop's BBS Name, to whom E-Mail is sent when messages to SysOp are sent as E-Mail. Be sure to enter this name in Mixed Case, ie. John Miller.
(Note: You MUST have a password entry with the same name as the name in line 6 or the message to SysOp function will not function properly. Also, the name on line 6 must be in Mixed Case.)

Line 7:
The Sysop's REAL Name and it also must be in Mixed Case.

Line 8:
Usually left blank, but if you like, you may enter a line of text here such like:
** Turbo Board Version 2 is NOW Released!!! **

It will be displayed a line above the main system prompt.

As shipped, PROMPT.TXT looks like:

Turbo Board ST
Turbo Board Version 2 >
Sysop intervening. Please wait.
Sysop Online...
Sorry, Sysop unavailable.
Sysop
Sysop's Real Name
This line from PROMPT.TXT will display above the Main Menu Prompt.

Example: To change your BBS so it would display "Your choice?" instead of Turbo Board> as the main menu prompt, change line 2 to Your choice?

Optional Text files

There are several optional Text files that you may use with Turbo Board. Each file area for instance may have a text file displayed when a user enters that area. These files are named FILE-DIR.TXT where FILE-DIR is the name of the file directory that you are in. Say you have a file directory called STFILES. If you create a text file called STFILES.TXT, it will be displayed every time a user enters the STFILES file area. These text files are located in the TXT subdir.

There are also text files that you may create for the message base system. MESAGEn.TXT, for instance is the text file that would be displayed if the user entered message base number n. You may have a text file for each message base that you have. (Note there is no MESAGE0.TXT file since Email has its own text file already.)

There are also NOTICE.TXT and DATNOTE.TXT. These files are displayed when a user logs onto the system. NOTICE.TXT is always displayed when it is present, but the DATNOTE.TXT (Dated Notice) file will only be displayed if the date stamp of the file is more recent than the user's last logon date.

LOGOUT.TXT is displayed when a user logs off the system, just before the final system goodbye.

GETPHONE.TXT may be sent before the request for phone number.

System Password

If you wish, you may also use a System Password on your bbs. This will stop anyone from even seeing your bbs unless they know the System Password. Just create a file called SYSPAS.DAT and place it in your DAT subdir. This file contains your system password. Note that this password is case sensitive, so make sure your users are aware of this. SYSPAS.TXT is an optional file that will be displayed before the Password prompt. It can go into the TXT subdir if you like.

Alternate Graphics text files

If you set up alternate graphics text files available for Turbo Board to access and have turned ON the GRAPHICS line in TURBO.OPT, the system will default to a standard menu at connect:

Select Menu Type: (0)=Ascii Text (1)=Ansi (2)=ST/VT52 (3)=Vidtex:

If you wish to have a different menu, you may create the file GRAPHICS.TXT (in the TXT subdir). If this file is not present, the system will default to the standard menu. This file should display the available menu choices to the user.

A sample GRAPHICS.TXT file is:

Please select the type menu desired:

0 = Standard 80 column Ascii menus
1 = Atari ST VT-52 menus
2 = 40 column Ascii menus
3 = 40 column Atascii menus

If Graphics is ON this file will be displayed at logon and whenever the I command at the main menu is selected. If a user presses a bare <Return> at this menu, Turbo Board will default to the 0 selection. The 0 selection uses the standard .TXT file names as discussed throughout the documentation.

If a user selects any other numeric choice then Turbo Board will scan the drives for the new text/graphics files to use. Turbo Board knows which files to display by the extension on the file name. The main part of the file name is the same as the standard files. The extension is .GRn, where the n corresponds to the number selected by the user when GRAPHICS.TXT is displayed. This allows you to have up to ten menu types available for your users.

For example, if the user entered a 1 to select Atari ST VT-52 menus, then Turbo Board will search for the files that have the extension .GR1. The main menu file you create for Atari ST VT-52 menu users would need to be named FUNCT.GR1. The welcome screen would be named WELCOME.GR1, etc. If Turbo Board can not find a file with the selected extension it will display the 'standard' .TXT file.

For your reference we have included a VT 52 escape code guide. You may use an editor such as the one in the Flash! terminal program to create VT 52 graphics, or you may use one of the many VT 52 editors that are available.

VT 52 Escape Code Guide

<ESC>A Cursor Up, the horizontal position stays same.
<ESC>B Cursor Down.
<ESC>C Cursor Right.
<ESC>D Cursor Left.
<ESC>H Cursor Home, move cursor to the upper left corner of the screen.
<ESC>I Reverse Line Feed, same as <ESC>A except if the cursor is in the top line, a blank line is inserted and the remainder of the text is scrolled down.
<ESC>L Insert Line, insert a blank line and the remainder of the text is scrolled down and the lowest line is lost.
<ESC>Yrowcolumn, move cursor to any place of the screen. The row and column are calculated in this way, take the row or column number and add 32, then find the character in ASCII decimal. For example, <ESC>Y+A moves cursor to 11th row, 33th column since '+' in ASCII is decimal 43 and 'A' is 65. Note that the upper left corner(home position) is 0,0 and the other corner is 23,79 in the medium resolution.
<ESC>j Save cursor, to be restored by the next function
<ESC>k Restore cursor, move cursor to the position the last <ESC>j is called.

<ESC>E Clear whole screen, and move cursor home (0, 0).
<ESC>J Clear below cursor, from the cursor to the end of the screen and the cursor position unchanged.
<ESC>K Clear to end of line, including the character at the current position but cursor position is not changed.
<ESC>M Delete line, and move the remainder of text up one line.
<ESC>d Clear screen to the cursor, from home position to current position, a complementary of <ESC>J.
<ESC>I Clear line, same as <ESC>M except the remainder is not scrolled up.
<ESC>o Clear line from start, from the beginning of the line to current position, a complementary of <ESC>K.

<ESC>e Cursor on, turn on the flashing cursor.
<ESC>f Cursor off, turn off the flashing cursor.
<ESC>p Reverse on, the foreground and background colours are changed. For example, the status line on the bottom of Flash! is in reversed video.
<ESC>q Reverse off, return back to normal video.
<ESC>v Wrap on, output beyond the edge of screen will be wrapped.
<ESC>w Wrap off.
<ESC>bColor_number Foreground colour, colour for character display. In medium resolution, 0-white, 1-red, 2-green, and 3-black.
<ESC>cColor_number Background colour. Be careful not to set the foreground colour the same as background.

GR_RESET.TXT

There is an optional file which may be used to reset the screen configuration/colours when a file is aborted using the <Control> C key. The name of this file is GR_RESET.TXT. If alternate menus are used you may have different files to reset the screen depending on the graphics mode in use by creating and naming these files in the format GR_RESET.GRx, where the 'x' is the graphics/alternate menu style selected by the user at logon or by use of the I command in the main menu.

For example, if your menu selection file allows a user to select Atari ST VT 52 screens by selecting menu type 1, you may want to reset the character and background color in the event of the user aborting a menu by creating a file GR_RESET.GR1 that contains:

(ESC)b1(ESC)c0(ESC)q(ESC)e(ESC)E

Where (ESC) is the escape character.

We have included GR_RESET.TXT on the release disk, you may use this file also for GR_RESET.GR1 if you like.

Note: If setting up Atascii menus and help files, you should be aware that Turbo Board will translate certain Ascii characters to their Atascii equivalent UNLESS you place the character (hex) FF in the first byte of the file. The character 0xFF is a flag to Turbo Board to not perform Ascii/Atascii translation on that file.

You may set up alternate menus/displays for any of the text files (the files ending in .TXT) used by Turbo Board. Remember that a 0 selection results in the standard .TXT files being used. You should NOT set up, or rename these files, as .GR0.

Special text file display functions

If Turbo Board finds the 'flag' character NULL (HEX 00) in the first byte of the file, it will look at the second byte of the text file for special display commands.

If the second byte of the file is set to:

HEX 01 - the file will be un-Control-C-able

If this flag is present Turbo Board will only allow users with the CTRLC_P privilege (privilege number 10) to abort the file. For all others a <Control> C will have no effect on the displaying of the file. This is useful for your new user welcome file, where you desire all the new users to read the entire file and be aware of your system rules.

Hex 02 - "Press any key to Continue" will be shown.

This is useful if you have a very short bulletin or other message that you don't want scrolled off the screen before someone reads it.

Hex 04 - Forces page mode ON (* More?(Y/N/C))

This is useful if you wish to have paging turned on for a particular file, whether the user has paging mode turned on or not. The more prompt will show after every 23 lines for a user.

Hex 08 - Forces Page mode OFF

If you wish to have the page mode turned off, this flag will override the user's settings for the file you place it in.

You may combine these functions by adding the corresponding HEX numbers together. If you wanted a file to be non Ctrl-C able, and also display "Press any key to continue" you would place a HEX 05 for the second byte of the file. The page mode toggles may be combined with the other functions, but if you combine them together, the page mode will stay off.

To insert these characters, I usually leave 2 spaces at the beginning of the top line of the text file, and then use a disk editor to change the two HEX 20 characters (space) to the 00 and whatever number I want for the second character. Bill will most likely make a simple utility to do this for you.

CONTIME.DAT

Connect time dat, will allow you to change the call time, minimum access levels, and minimum baud rates for your users depending on the time of day. You may vary the actual time your users are allowed to remain on the BBS for their call (adjusting the Call time limit that is set in the user's profile) and also 'screen out' users below a set access level during certain times of the day. To do this you need to use a file named CONTIME.DAT (for Connection time data). This file is 48 lines long, one line for every half hour, with the first line for the setting to be used from midnight to 00:30 AM.

The first few lines of a sample CONTIME.DAT file are:

```
80  10  10  1200  1200am
80  10  10  1200  1230
100 0   0   300   0100
100 0   0   300   0130
```

As you can see, there are five columns, but the bbs only uses the first four, the last is for your reference.

Turbo Board looks at each line and reads the first number (or only number if there is but one) and divides it by 100. This result is multiplied with the user's Call Time Limit, and the new, adjusted Call Time Limit is used for the user for that call. For example, if a user has a Call Time Limit of 60 minutes, and logs on at 12:15 AM, Turbo Board would set his actual Call Time Limit for that call to:

80/100*60=48 minutes

The user would be told his time limit for this call is 48 minutes. If the user had called at 01:02 AM, they would have been told they were allowed 60 minutes. (100/100*60)

The time a user is allowed to remain on the BBS during a call, as set in the user's profile, may also be varied during the day.

The second number on each line, is the minimum access level to allow on the system during that half hour. In the example, only users with an access level (file download access level) of 10 or higher would be allowed to log on from midnight to 1 am.

The third number on each line is the minimum doors access level. This works the same way as the min access level, but only will lock out the doors area (J from the main menu) to users that do not have high enough access for that time period.

The fourth number is the minimum baud rate that will be allowed for each time period. In the example, you can see that 1200 baud is the minimum rate from 1200 am to 0100am, 300 baud after that.

The number of spaces between these entries doesn't matter, but if you separate them with a few spaces as shown, it will be easier to read.

LOCKOUT.TXT

It is sad to say, but there are 'undesirable' elements even when it comes to BBS users. Some of these users like to use obscenities as part of their 'name' on the BBS. There may be other text besides obscenities that you do not want your user's to use in their name, such as Cracker, Phreek, etc. To solve this problem you may use a file named LOCKOUT.TXT.

The LOCKOUT.TXT file is an optional text file you maintain which consists of lines of substrings. If any of these strings are located in a new user's name then the user is hung up on IMMEDIATELY.

An example of a few lines of LOCKOUT.TXT is:

THE
CRACKER
BASHER
EATER

If a new user should log on as THE WIZARD, they would be hung up on. You could also use full names, a 'twit' flag for that user, to lock out habitually offensive users.

Note: Words such as THE should have a space after them so names like THEODORE are ok.

FTYPE.LST

In your file section you may specify up to twenty file categories, one category to a line, in the file FTYPE.LST. This is the information displayed under "Application" in the file headers, and is requested of the user when uploading a file if the FTYPE.LST file is on the system. A sample file is included on your distribution disk. Note: Each category, or application, is limited to twenty characters.

The file FTYPES.LST is also optional. If it is not present, the file application field in a verbose list will be blank. (And no application will be asked for on an upload.)

System Macros

You may create macro files for your users based on their access level. The format of MACROS.DAT is Macro Name, then Macro Access Level, then the commands for the particular macro. If a macro is entered on any prompt in the BBS, the system will immediately send the user to the main menu, so you always start your command assuming that you are on the main menu, and you can command stack from there.

The format of MACROS.DAT is:

Macro Description
Macro Name
Minimum Access Level
Commands for Macro

An example of the file MACROS.DAT is given below:
(Note the ! for the end of file marker)

```
Play DDST, use this macro!
*DDST
10
j/1
Go Directly to TURBO.ARC for DL
*TURBO
1000
f/l/l/1/TURBO.ARC
!
```

If a user is at access 0, he will not see any of these macros if he hits A from the main menu, nor will any of them operate for him. A user at access level 10 may use the first macro, and a user at level 1000 may use both of them. MACROS.TXT is a text file that may be displayed before the available macros, if the user hits A from the main menu. We strongly suggest that you begin your macro names with a seldom used character, as this will prevent conflicts with the word of the macro being used elsewhere in the system. Please note that you may have up to 32 different macros for your system.

Sysop Macros

The Sysop can also have his own macros. If you edit the file MKEYS.DAT, you may place a macro or just a text string on 10 lines
in the text file. These lines will correspond to the ALT-F1 to ALT-F10 function key combos on your system keyboard. If you hit G from the Sysop mode, you will see a list of the available Sysop macros at the end. Please note that these macros are only available locally. I use line 1 to hold my ID#/PASSWORD so I can use ALT-F1 to log into my system. You may also just use them as text strings for instance as a special footer text line when you enter a message.

ie.

John @ Turbo Board Support 416-274-1225 Node 18

You may have up to 10 different Sysop Macros, one for each ALT- Function key combination.

Editing the Help files

The Turbo Board help files contained on your distribution disk are not cast in concrete. You may modify, add to, subtract from the HELP.TXT file as you desire. However, the help file is indexed and you must re-run option W in Tsysgen whenever you have made any changes to the text file. Because the index file allows subtopics, there is a required format to the main help text file. The format of each main help file entry is:

TOPIC: Topic_title
BLANK LINE
Text
>

The > character in position 1 of a new line marks the end of the information for that topic.

An example is:

TOPIC: PROTOCOLS

Turbo Board offers a wide range of file transfer protocols for your use. All the protocols with the exception of Ascii Xon/Xoff perform some form of error checking on the file transfer.
>

In order to list subtopics you must also include a line in the text portion as follows:

~ADDITIONAL INFORMATION AVAILABLE

Subtopics list

The subtopics list is on a single line, as in:

~ADDITIONAL INFORMATION AVAILABLE

A F G K S X Y Z

The topic entry for a subtopic is:

TOPIC: Topic Subtopic

Using the above examples, our TOPIC for Ymodem would be:

TOPIC: PROTOCOLS Y

Ymodem

Ymodem is similar to Xmodem, but always uses CRC error checking and has 1K block sizes. Ymodem is also batch capable, but many terminal programs do not support the batch Ymodem protocol. If you have questions you should look in their terminal documentation to see if it supports batch file downloads using Ymodem.
>
* Note *

If any changes are made to the HELP.TXT file without generating a new index file with Tsysgen, then a user executing the help command will receive 'garbage' for any command referenced in the help file after the point where the file was changed. Make sure that you use Option W to rebuild the HELP.IDX file or to generate a new one, if it does not exist.

Chapter 8 - Network Mail

The Fnet System

The Fnet mailer (networking) programs included with the Turbo Board ST release package is not a product of, nor monetarily supported by, Bitblit Systems. Turbo Board has been modified to operate in conjunction with the mailer, and to provide the necessary information to the mailer for it to perform its functions. The actual dialing out and receiving of mail from other BBSs is accomplished by the mailer program and not Turbo Board. We are not responsible for the operation of any of these programs, nor are we responsible for the updating of these programs. The FNET programs contained on the FNET SHAREWARE Release disk are a compilation of the programs that are required to run the FNET mailer, and Crossnet.

Fnet and Fmailer Documentation

The Fmailer documentation is quite extensive, and for the sake of our costs, we have not included it as part of this manual. Please refer to the file FMAILER.DOC which is contained in the FMAILER.LZH file, located on your FNET SHAREWARE disk. An FNET node application form is included for your convenience.

Crossnet

Crossnet is a shareware program developed by Ben Roth at node 96 that expands the capabilities of the Fnet system. In simplest terms, it links a message base on several BBSs together so that any message entered on one BBS will be sent to all the other BBSs in the "conference". Proper reply chains are maintained, as much as possible, and the net effect is a shared message base among several BBSs. There are a wide range of conferences currently in use, including a National SysOps conference and an Atari Technical conference with Atari representatives available.

Because a message base designated as a Crossnet base is 'dedicated' to that conference, you may not enter a message as an Fnet message while in it. This may seem like a contradiction, but the Crossnet program will do the addressing of all messages entered on the base. And if you sent a message to a node not in your conference from that particular base, you would not only disrupt the 'homogeneity' of the base on the other nodes, but any reply would not be routed to the proper base. Please refer to the CROSSNET.LZH file for more information.

SAF LZH

Nearly all SAF traffic on the net is now compressed prior to sending by use of the SAF LZH program. This program was written by Bill Day at node 398, and is freeware (free, but contributions accepted). SAFs that have been compressed will have an extension of .008, and must be uncompressed before they can be used by one of the other SAF programs. Please refer to the SAF_LZH.LZH file for more information.

F-Net Manager

This Shareware Fnet Utility can greatly assist the Sysop in setting up and maintaining the FNETLINK.DAT and FNETNODE.DAT files. It helps plan the best route to nodes, shows you new nodes, and allows you to obtain routing data files from nodes you do not directly connect with. The Manager was created by Bill Turner at FNET node 185. Please refer to the FNETMNGR.LZH file for more information

FIDO Network System

The FIDO mailer (networking) programs included with the Turbo Board ST release package are not products of, nor monetarily supported by, Bitblit Systems. Turbo Board has been modified to operate in conjunction with the FIDO Binkleyterm mailer, and to provide the necessary information to the mailer for it to perform its functions. The actual dialing out and receiving of mail from other BBSs is accomplished by the mailer program and not Turbo Board. We are not responsible for the operation of any of these programs, nor are we responsible for the updating of these programs. The FIDO Netmail programs contained on the FIDONET SHAREWARE Release disk are a compilation of the programs that are required to run the FIDO mailer, and it's support programs.

The FIDONET SHAREWARE Disk contains all the necessary files to set up the FIDO Binkleyterm mailer, and FIDO conference mail. To set these files up, you are on your own, and please do not contact us for help. We only have placed the hooks into Turbo Board to operate Binkleyterm, we do not support the actual Binkley program. There are a number of Turbo Board Sysops running Fido mailers, and you can always ask them for help on proper setup.

Chapter 9 - Forem Compatible Functions

The Fnet Compatible Message Base Format

Turbo Board uses the same structures of the message base files that are used in Forem ST, and they are directly compatible. This was done to retain compatibility with the Fmailer and the Fnet system.

The Forem ST Compatible Database

The Forem ST compatible Database is supplied for those Sysops who are updating their systems to Turbo Version 2. It will allow to run your old Database while you are reconfiguring the Newer, more versatile Turbo Board Version 2 Database. Since we have supplied this base, we decided to retain the documentation for it here.

If you wish, you can use the Forem ST compatible Database supplied as DBASEOLD.SYS instead of the Newer Turbo Board V2 Database. You must rename this file to DBASE.SYS (Rename DBASE.SYS to DBASENEW.SYS first)

The Forem ST database will then replace the Turbo V2 Style database, when the user enters the D function (see Menu.dat setup for details).

The Database is an area where he may read text files set up by the sysop. Users may also upload files for the database if they are cleared for use of the DU command by the SysOp. (See Sysop section for details.) The database section is menu based and submenus are allowed.

First, if you have only one database it should be named FDBASE. This is the name of the folder that came on your distribution disk with sample database files. You may have multiple database areas, as many as you desire to set up. Before getting into multiple databases let's look at the format of the files within each individual area.

When a user selects a database Turbo Board will display a file (you create) named DBSEL.TXT. In this file you list the additional text files which may be read by the users. Give each text file a number, starting at 1. An example of a DBSEL.TXT file for a database with three files is:

Turbo Board General News Database

1 - Upcoming computer events in the area.
2 - New commands available with Turbo Board 1.0
3 - How to use the F-Net system

So far, so good? OK, you have your text file made up, now how does Turbo Board know which files to show when a user enters a 1, 2 or 3? It is basically a simple coding scheme that is used. The first two characters of the file names are DB, for DataBase. The next three characters are the number to be entered by the user to see that file. Three? Yes, use leading 0's. Using this code our three files would be:

DB001 (the computer events file)
DB002 (the new commands of Turbo Board 2.0)
and
DB003 (information on the F-Net system)

If Turbo Board did not allow sub-menus this would be all we would need. However, since Turbo Board DOES allow sub-menus we will need to use the file name extension. Since these are not 'sub-menued' choices, we will use an extension of '000'. This makes our file names now:

DB001.000, DB002.000 and DB003.000

What about sub-menus? Lets use an example again. Assume the file on the upcoming computer events was growing too large, or that there were so many events you decided to break it down into specific computer information files. Rather than list three individual files in the main database menu, you decide to make that selection the lead into a sub-menu. If the user enters a 1 at the database prompt we want the following file to be shown:

Upcoming Computer Events

1 - Atari area happenings
2 - IBM area happenings
3 - General computer events

To let Turbo Board know that this file is a sub-menu, we use an 'M' after the three digit selection number in the file name. So we name this file DB001M.000

What about the sub-menu selections? How does Turbo Board know which files to show when a user enters '1' now, after displaying our sub-menu file? That is where the extension comes in. Since these are sub-menus of the file DB001M.000, we use the last three digits (the extension) to specify the file to be shown when in the sub-menu. We do not use the 'M' in the file name with these files. So our sub-menu files are named:

DB001.001 (the atari happenings file)
DB001.002 (the IBM happenings file)
DB001.003 (the general computer events)

This coding scheme allows you to have a sub-menu for every selection in the main database menu if you so desire, as each file has a unique name. DB001.001, DB002.001 and DB003.001 are all files that will be shown when a 1 is entered while in a sub-menu, but Turbo Board knows which to display by the first part of the name.

There is a special significance to the file DB001.000 (or DB001M.000 if a sub-menu is desired) in the FDBASE folder. This file is the System Bulletins file displayed when the user selects B at the main menu, or displayed at log-on if the TURBO.OPT file entry for BULLETINS is ON.

Multiple database areas

As previously mentioned, Turbo Board allows multiple databases to be set up. The access level for each database is individually set, and each user has a database access level that is independent of their file access level. To use additional databases, or to use a single data base with a folder name other than TDBASE, you must inform Turbo Board about these bases/names in a file named TDBASE.LST. The file must tell Turbo Board (1) the name of the folder the database is in (remember, each database must be in a separate folder or the file names would conflict); (2) the name of the database to be displayed when the user wishes to switch databases and; (3) the access level required to see the database. This information is entered one line at a time in the TDBASE.LST file. Note that the Forem ST version of TDBASE.LST doesn't contain the BULLETIN flag.

An example TDBASE.LST is:

```
TDBASE
The General News Database
0
HDWARE
The Hardware Database
5
```

The first database is in the folder TDBASE and has a database access level of 0. The second database, named The Hardware Database, is in the folder HDWARE and has an access level of 5. If you are only using a single database you do not need the file TDBASE.LST. If there is no TDBASE.LST file Turbo Board will default to a single database and will look for it in the folder TDBASE. It will assume an access level of 0 for this database.

To switch databases the user must enter an "O" while in a database and at the main database menu level. (ie., you may not change databases while in a sub-menu.) This command is not shown by Turbo Board, so if you have multiple databases you should show this command in your DBSEL.TXT file.

Since users may upload files for use in the databases, as explained above, and since Turbo Board ALWAYS stores files received on the drive with the most free memory, you MUST create a separate folder for each database to be used on each drive accessed by Turbo Board. These folders may be left empty, they just must exist or there will be system errors when a user attempts to upload a file to a database.

Forem Doors

The "Doors" Feature is now obsolete, since Version 2 of Turbo Board will allow you to execute any batch file or online type program when you configure the Main Menu and Submenus. This information is included since we still retain the 'Doors' feature to keep compatibility with Turbo Board Version 1 and Forem ST. The information on TURBO.DAT and DORINFO1.DEF, and the general online programming information given, is still valid.

Turbo Board allows the SysOp to set up additional programs the users may execute. When one of these programs is run, Turbo Board 'goes to sleep'. What this means is the new program that is running must (1) do its own carrier detect. If the user hangs up or loses the connection while the Doors program is running, then the doors program should end and return control to Turbo Board. If it does not, and 'hangs' waiting for a user response, the BBS will be 'down' until you reset the system! (2) Keep track of the time spent on the BBS. Turbo Board will not be running, so it can not tell a user in a Doors program that his time has expired and log him off.

For these reasons you should only use programs that have been developed for use with the Doors feature, or that have been modified for use with the Doors feature. Note: Doors programs for the Atari ST must be compiled as .TOS programs.

Running Doors Programs

Function J in the menu.dat is the doors system.

Upon entering, Turbo Board will display a file named DOORSENT.TXT.

Turbo Board will next display a list of external programs available to the user. Each program will have an access number for selection. If there are more than 10 Doors programs then Turbo Board will display 10 at a time and allow the user to select one or display (M)ore. When the last page of selections is displayed, there will also be shown a choice of ? to display the choices again. This will display the first page of selections and the user may again continue to the next page or select one of the programs.

The actions Turbo Board will take when a user makes a valid selection depend on the setup of the Doors section by the SysOp. Rather than explain it here, the setup section will cover the options available.

Setting up the Doors Section

Important Note for Turbo Board users

Turbo Board will NOT redirect I/O or have a carrier detect during a Doors program execution. Most Doors games and other online programs that are popular today will perform their own redirection. However if you would like to run a TOS program that doesn't have it's own redirection, we have included a PD program known as FCSHELL and it can handle the redirection for you. FCSHELL will be found in an archived format on the release disk, if you require it. Each program has an associated access level corresponding to the users download access level. If the user's access level is below the Doors program's access level required, then that program choice will not be displayed. The list of programs available is maintained in a file named FDOORS.DAT which resides in the main Turbo Board directory or the alternate DAT directory specified in TURBO.OPT. The format of this file is as follows:

Door name
access level
name of file to be sent before program execution
command line for remote use of the program
command line for local use of the program
name of file to be displayed after program execution

Note that the enter and exit file name lines may be blank.

Example:

```
DDST -- The Adventure Game!
0
c:\bbs\ddst\ddst.ent
c:\bbs\ddst\ddst.tos
c:\bbs\ddst\ddst.tos
c;\bbs\ddst\ddst.exi
High-Low Jackpot
1
c:\bbs\doors\d2ent.txt
c:\bbs\doors\highlow.tos
c:\bbs\doors\highlow.tos local
c:\bbs\doors\d2exi.txt
```

Looking closely at the example file, it is telling Turbo Board: A user with level zero file download access will see a single program that may be run from Doors, DDST. The text displayed to the user will be:

1) DDST -- The Adventure Game!

Enter Door (Q=Quit ?=List Again)>

If the user has file download access of 1 or higher they will see:

1) DDST -- The Adventure Game!
2) High-Low Jackpot

Enter Door (Q=Quit ?=List Again)>

If door number 1 is selected, DDST, then Turbo Board will display the text file DDST.ENT located on drive C in folder BBS\DDST\. If it is a call-in user (not a local log-on) then Turbo Board will next pass the command c:\bbs\ddst\ddst.tos to Turbo Board's command shell. The command line parameters passed after the file name are optional, in this case, they are not needed.

If the user performed a console logon and selected door number 2, then Turbo Board will pass the command:
c:\bbs\doors\highlow.tos local
to the shell, which will run the program HIGHLOW.TOS passing the command line parameter LOCAL.

When program control is returned to Turbo Board (when the doors program ends), no exiting text file will be displayed if the line that would contain the file to display is blank. The user will be shown the doors selection prompt again in order to make a selection, exit or redisplay the list of available choices.

This may appear confusing to you, and there is no way by looking at a program to know what to put in the FDOORS.DAT file! You must rely on the documentation enclosed with the Doors programs you acquire to specify how you should set up FDOORS.DAT for each Doors program. If you write a Doors program, be sure and include exactly how to set up the FDOORS.DAT file for your program.

Multiple Doors Menus

For multiple doors menu files, create a file called DOORMENU.TXT. This is just like dbsel.txt as in:

1) Games
2) Quizzes
3) Music

Then for each type, generate a "FDOORSn.DAT file". So all games would be in FDOORS1.DAT. Delete the original FDOORS.DAT file if you intend on using multiple menus.

When a user enters the Doors, he will first be shown the DOORMENU.TXT file and then depending on which category chosen, he will be shown the appropriate FDOORSx.DAT file.

Chapter 10 - Writing Doors Programs

Since the advent of the original Forem ST Doors online functions, there have been many new Online programs written especially for a bbs. Turbo Board Version 2 doesn't need to use the "Doors" section to execute these programs, since you may execute an Online program using the Configurable Menu system in Version 2.

It is relatively easy to write a "DOORS" Online program for use with the Turbo Board. The main thing to remember is to have I/O redirection out the AUX (rs232) port, check for loss of carrier on a remote logon, and if possible to have some kind of time check in the program so a user does not run the online program 'forever'.

TURBO.DAT (FOREM.DAT)

Turbo Board provides a file of information that you may use in your Doors program whenever a doors program is executed. This file is named TURBO.DAT and contains six records.

The first record in TURBO.DAT is the system configuration, the second is the first 400 bytes of the user's password entry. In Turbo Version 2, a password record is actually 512 bytes long, but we transfer only the first 400 bytes to retain compatibility with Forem ST. (See Appendix B). The third is a long integer (4 bytes) containing the users connect time so far for this call. The fourth and fifth entries are the sum of the user's baud rate and parity setting codes. The baud rate and parity are coded, with the parity containing information on the parity, word length and stop bits as:

Baud	Code	Parity	Code
9600	1	None	0
4800	2	Even	6
2400	4	Odd	4
1200	7	Word length	
300	9	8 bits	0
		7 bits	32
		Stop bits	
		1 stop bit	8
		2 stop bits	24

Example: A parity code of 14 means 8 bit word length, 1 stop bit, Even parity.

The last entry is the user's logon time in ten character Ascii format. (See Chapter 14, File Structures, for the formats of the first two types.) To perform carrier detection on the Atari ST you must Peek memory location (hex) FFFA00. Read the WORD (2 bytes) contained at that address. If bit 1 of the value returned is 0 then a carrier is present. (The easiest way to determine this is to AND the value returned with 2. If the result is 0 then there is a carrier present.)

Note: TURBO.DAT is identical to FOREM.DAT, which is also created for older doors games

DOORINFO.DEF

Turbo Board also supports the new standard for passing information to Doors programs. The line in TURBO.OPT just after the via message base line, should be the full path name to where doors programs reside. In this directory, Turbo Board will write a text file called DORINFO1.DEF (This pathname is usually the pathname to the TURBO2.PRG)

This text file is defined as:

1 BBS NAME
2 SYSOP'S FIRST NAME
3 SYSOP'S LAST NAME
4 COMPORT COM1 COM2 NO COLON (ALWAYS COM 1)
5 1200,PAR,DATABIT,STOPBIT IE. 1200,E,8,1
6 NETWORKING
7 USER'S FIRST NAME
8 USER'S LAST NAME
9 CITY STATE
10 GRAPHICS ON OFF FOR ANSI ONLY 0 or 1
11 ACCESS LEVEL OF USER
12 TIME LEFT IN MINUTES

Chapter 11 - Tips

When reading messages, while the message is printing out, if the <Control> key is held while pressing the N key, the current message being displayed will abort and next message in the read list will be shown. If the B key is pressed in conjunction with the <Control> key then the previously displayed message will be displayed again. These keystrokes perform the same actions as if the letters themselves (N and B) had been entered at the "Read Msg Cmd" prompt.

If you would like to move files that are in a certain file area to another drive, all you have to do is to move them over to the new drive. As long as they are in the same file subdirectory, Turbo Board will have no problem finding them on the new drive. (Assuming the new drive has been entered in TURBO.OPT)

ie. From the DOS shell: Move C:\bbs\stfiles*.* G:\bbs\stfiles (The board will find them in the new drive with no problem.)

When creating your SIGS.TXT file, be sure to place any flags (H, R, C) leaving a space after the Message Base number. ie. 1 HRC , not 1HRC

At any prompt requesting a Yes or No answer, such as "Send Anonymously?", if the <Return> key is pressed without any other input it will be counted as a No. If the <Space Bar> is pressed it will be interpreted as a Yes. (No <Return> after pressing the <Space Bar>.)

<Return> = No
<Space Bar> = Yes

Reminder - If your password is in record 0 (the first record), you may log on by entering 00 as your ID number

Passwords may be entered at the initial "Enter ID number or Full Name (0=New User)>" prompt by separating the name and the password with a back slash. Example - John Smith/computer Where the user's name is John Smith and his password is computer.

As a SysOp you might want to send a file to a user using the F-Mail system. You (obviously) should not need to upload it. To send a file already existing on the computer, enter the full path name for the file when F-Mail asks for the file to send. This file will now be copied to the F-Mail directory. You must give the full filename (ie., C:\filename). Also, in order for a user to be able to use this feature the FMAIL_P privilege (privilege number 12) must be enabled.

The TPAS.DAT, TPAS.IDX and CONFIG.DAT files should NOT be placed in your alternate .DAT directory, but remain in the default Turbo Board directory where they were created by the Tsysgen program. HELP.TXT and HELP.IDX should also be in your default Turbo Board directory and not the alternate .TXT folder.

When you enter SysOp mode by pressing either the F1 or F2 key while no user is on the system, the modem control line will go low, which should prevent the modem from answering any calls in. It is best to use F1 if no user is present, since F2

will not cycle or reset the modem if it is used.

When a local log-on is performed (pressing <Return> at the waitring screen) the modem will go off hook. This presents a BUSY signal to any users trying to call in.

Every 15 minutes (approximately) while no user is on the system the BBS will reset the modem. You will see the cursor appear on the screen by the time display, and the modem reset. This is to prevent any modem errors from keeping your BBS from answering incoming calls by insuring the modem is set properly.

If validating a user while they are on-line, do not use the V command. Instead use U - Set user data, as the disk record is overwritten when the user logs off, erasing any changes you might have made. The U command will alter the profile in memory, and the new profile will be saved when they log off. Use the T command to give the user more time if the mask he was formerly set to, had a short time limit.

If you receive a system error 20 on a file upload, it usually means Turbo Board could not find the appropriate folder/directory to save the file in. You MUST have all the folders on all the drives Turbo Board will access. This same problem, not having all the folders on all the drives, can cause extended messages to be 'blank', as Turbo Board could not save the message body as a file if the folder could not be found.

If you receive errors -33 or -34, that usually means a file was not found or a pathname is not good. Check!

If you would like to abort the BBS initialization, if you have just started the board, wait for the Turbo Board copyright Box to come up, and for the colours to change to the BBS screen colours, then press <Control>-C, and the bbs will abort loading and return to the desktop.

Be sure that the RS-232 cable that you are using from the ST to the modem supports Pin 22 (Ring Indicator), or the BBS will not pick up any incoming calls. If you do not see the message <Ring Detected> when the modem AA (or RI) led flashes, then you need a new RS 232 cable.

Chapter 12 - Sample Work sheets

BBS Setup

Number of drives on-line (1-16):

Order for Turbo Board to search the drives to find files:
(ex., AB, BA, CDEF)

Number of message bases (1-64):

Name and Number of messages to allocate for each message base:

Base #	Message base name	Number of messages
(example -	General Messages	100)
1:		
2:		
3:		
4:		
5:		
6:		
7:		
8:		
9:		
10:		

Number of allocated Electronic Mail (E-Mail) messages (1-500):

Names of download directories (up to 20 allowed):

Directory #	Full Directory Name	Folder Name
(example -	ST Files	STFILES)
1:		
2:		
3:		
4:		
5:		
6:		
7:		
8:		
9:		
10:		

Names of your download categories (up to 20 allowed)
(Examples - STFILES, PCFILES, SYSOP, UTILITY, GAMES)

1:	11:
2:	12:
3:	13:
4:	14:
5:	15:
6:	16:
7:	17:
8:	18:
9:	19:
10:	20:

Default BBS folder? Name:
(\ if using root directory)

Message sub-directory? Name:

Survey system sub-directory? Name:

Text/Graphics sub-directory? Name:

.DAT file sub-directory? Name:

.BAT file sub-directory? Name:

Did you place LHARC.TTP and ARC.TTP in the main BBS directory?

Data base folders:

1:
2:
3:
4:
5:
6:
7:
8:
9:
10:

Validation Mask Work Sheet Mask Number:____

(A) Privileges

(1) (Y/N) SYSOP_P - May use $ command - Sysop Privileges
(2) (Y/N) SYSUSR_P - May leave SYSUSR:X message
(3) (Y/N) ANON_P - May send anonymous messages (not in E-Mail)
(4) (Y/N) PRINT_P - May print message from message base
(5) (Y/N) RMESS_P - May read any locked message (Not in E-Mail)
(6) (Y/N) RMAIL_P - May read any E-Mail message
(7) (Y/N) FANON_P - May get sender of anonymous message
(8) (Y/N) TANON_P - May get addressee of reply to anonymous message
(9) (Y/N) BTIME_P - May bypass daily connect time limit
(10) (Y/N) CTRLC_P - May abort a 'non-abortable' text file
(11) (Y/N) RATIO_P - May bypass the Upload/Download file ratio
(12) (Y/N) FMAIL_P - May copy F-Mail rather than Upload (use path name to copy to Fmail folder)
(13) (Y/N) MSGTO_P - May change addressee of message
(14) (Y/N) MSGSUB_P - May change message subject
(15) (Y/N) DELM_P - May delete any message
(16) (Y/N) EDMESS_P - May edit any existing message
(17) (Y/N) SYSMSG_P - May send a system message (not auto deleted)
(18) (Y/N) EDOMSG_P - May edit a message the user has left.
(19) (Y/N) EXCLIM_P - May exceed daily call limit
(20) (Y/N) MAISAV_P - May save an E-Mail message from auto deletion
(21) (Y/N) AN_MAI_P - May send anonymous E-Mail
(22) (Y/N) CPMSG_P - May copy message to another base
(23) (Y/N) NETMAIL_P - May send a message on the Fnet system
(24) (Y/N) LOCMAIL_P - May save Fnet message entered from being auto deleted after it is sent.
(25) (Y/N) NETALL_P - May send an Fnet message to ALL nodes
(26) (Y/N) NET_SAVE_P - May address an existing message to the Fnet system
(27) (Y/N) NET_FILE_P - May send Fmail files through the Fnet system.
(28) (Y/N) LOCK_MSG_P - May lock or make private any message on the message bases, and also be able to unlock any message.
(29) (Y/N) RM_FILE_P - May remove any file he has uploaded with his name. If user has SYSOP_P, he may remove ANY file .
(30) (Y/N) CRASH_MAIL_P- Used for sending run Fidonet Mail
(31) (Y/N) MLIST_P - Allows Use of a File when sending a message to a list of people or list of Fnet nodes
(32) (Y/N) CONFMAIL_P - May send Conference F-Mail on regular or Crossnet message bases.

(Circle Y for yes, N for no)

Validation Mask Work Sheet Mask Number:____

(A) Extended Privileges

(1) (Y/N) HANDLE_P - Allow User to change BBS handle
(2) (Y/N) FILE_ED_P - Allow User access to File Editor
(3) (Y/N) FREE_DL_P - Download Free Flag Active
(4) (Y/N) SFREE_DL_P - Set Free Flag when uploading
(5) (Y/N) ALIAS_UL_P - Use Alias when Uploading
(6) (Y/N) BATCH_UL_P - Allow Batch Uploading
(7) (Y/N) COPY_TYPE_P- Allow Copy/type ability when viewing files
(8) (Y/N) DB_SYSOP_P - Allow Sysop Database Functions
(9) (Y/N) GREET_P - Allow User to send a Greeting Message
(10) (Y/N) INCLUDE_P - Allow User to Include a reply in a message
(11) (Y/N) STRIP_INC_P- Override Strip Included Reply function

(Circle Y for yes, N for no)

(B) Message Base Access

Name	Read	Send	CM U/L	CM D/L
1:	: :	: :	: :	: :
2:	: :	: :	: :	: :
3:	: :	: :	: :	: :
4:	: :	: :	: :	: :
5:	: :	: :	: :	: :
6:	: :	: :	: :	: :
7:	: :	: :	: :	: :
8:	: :	: :	: :	: :
9:	: :	: :	: :	: :
10:	: :	: :	: :	: :
11:	: :	: :	: :	: :
12:	: :	: :	: :	: :
13:	: :	: :	: :	: :
14:	: :	: :	: :	: :
15:	: :	: :	: :	: :
16:	: :	: :	: :	: :
17:	: :	: :	: :	: :
18:	: :	: :	: :	: :
19:	: :	: :	: :	: :
20:	: :	: :	: :	: :

(C) System Functions (Commands Allowed)

(1) (Y/N)	A)	Available Macros
(2) (Y/N)	B)	Redisplay System Bulletins
(3) (Y/N)	C)	Yell for SysOp (Chat request)
(4) (Y/N)	D)	Enter Data Base
(5) (Y/N)	E)	Enter E-Mail System
(6) (Y/N)	F)	Enter Files System
(7) (Y/N)	I)	Set Alternate Graphics
(8) (Y/N)	J)	Doors Subsystem
(9) (Y/N)	K)	Add to Other BBS list
(10) (Y/N)	L)	Leave a message to SysOp
(11) (Y/N)	M)	Enter Message bases
(12) (Y/N)	N)	Change password
(13) (Y/N)	O)	Display Other BBS list
(14) (Y/N)	P)	Display own user's profile
(15) (Y/N)	Q)	Set terminal type/line feeds
(16) (Y/N)	R)	Ringback command
(17) (Y/N)	U)	Display user log
(18) (Y/N)	V)	Enter Survey area
(19) (Y/N)	W)	Change Handle
(20) (Y/N)	X)	Send F-Mail
(21) (Y/N)	Y)	Sysop Mode
(22) (Y/N)	D/D)	May download (read) data base files
(23) (Y/N)	D/U)	May upload data base files
(24) (Y/N)	F/LSWX)	May get list of download files
(25) (Y/N)	F/BDM)	May (batch) download files
(26) (Y/N)	F/U)	May upload files

(Functions 27, 28, 29, 30, 31 and 32 are not currently used)

(D) Usrbits

(Circle one)

(1) Connect time displayed at each entry to main menu(Y/N)
(2) Continuous scroll on in message bases ----- (Y/N)
(3) Clear screen for each new message/function --- (Y/N)
(4) Message editor word wrap on ---------- (Y/N)
(5) Force Email Read at logon ---------- (Y/N)
(6) Line numbers on in message editor ------- (Y/N)
(7) Use Long Distance Ringback code and Area code -(Y/N)
(8) 40 column mode ---------- (Y/N)
(9) Display full screen on local logon ------- (Y/N)
(10) Continuous scroll on in files section ----- (Y/N)
(11) Download Database ---------- (Y/N)
(12) No Editor Help file displayed --------- (Y/N)
(13) Paged Output ---------- (Y/N)
(14) Quick Prompt Command Line in Editor ------ (Y/N)

(E) File Editor Commands

(1)	A - Application	(Y/N)	(2)	C - Copy File	(Y/N)
(3)	D - Description	(Y/N)	(4)	E - Enter all fields	(Y/N)
(5)	F - Flags	(Y/N)	(6)	L - Level	(Y/N)
(7)	M - Move File	(Y/N)	(8)	N - Re-Name File	(Y/N)
(9)	R - Remove File	(Y/N)	(10)	T - Touch Date	(Y/N)
(11)	U - Uploader	(Y/N)	(12)	W - Rating	(Y/N)

(F) Sysop Mode Functions

(1)	A - Accounting	(Y/N)	(2)	B - BBS List Edit	(Y/N)
(3)	C - Chat	(Y/N)	(4)	D - DOS Shell	(Y/N)
(5)	E - Sysop Email	(Y/N)	(6)	F - Files Edit	(Y/N)
(7)	G - Get Config	(Y/N)	(8)	H - Hang up User	(Y/N)
(9)	I - Edit File	(Y/N)	(10)	L - Log Print	(Y/N)
(11)	M - Email Cleanup	(Y/N)	(12)	N - Set Time	(Y/N)
(13)	O - Reload Options	(Y/N)	(14)	P - Printer log	(Y/N)
(15)	R - Reserve System	(Y/N)	(16)	S - System Status	(Y/N)
(17)	T - Give User Time	(Y/N)	(18)	U - Online User Pas	(Y/N)
(19)	V - Validate Users	(Y/N)	(20)	Y - Toggle Chat	(Y/N)
(21)	Z - Message Cleanup	(Y/N)	(22)	DOS - End BBS Run	(Y/N)
(23)	> - End BBS Run	(Y/N)			

(G) Limits

(A) Maximum number of calls per day :___
(B) Maximum number of file uploads per day :___
(C) Maximum number of file downloads per day :___
(D) Maximum number of data base uploads per day :___
(E) Maximum number of data base downloads per day :___
(F) Maximum number of E-Mail messages to be sent per day:___
(G) Maximum number of messages to be sent per day :___
(H) Daily Fnet message limit/access level :___
(I) Daily time allowed (total - all calls) :___
(J) Time limit per call (in minutes) :___
(K) Maximum number of additions to ARCDL.ARC :___

Access Levels

(N) Database access level :___
(O) File access level :___

Ratios

(P) UL/DL File Ratio (n:1) :___
(R) UL/DL Byte Ratio (n:1) :___

(Y) File Directory Access

File Area Name	(Circle one)	File Area Name	(Circle one)
1:	(Y/N)	2:	(Y/N)
3:	(Y/N)	4:	(Y/N)
5:	(Y/N)	6:	(Y/N)
7:	(Y/N)	8:	(Y/N)
9:	(Y/N)	10:	(Y/N)
11:	(Y/N)	12:	(Y/N)
13:	(Y/N)	14:	(Y/N)
15:	(Y/N)	16:	(Y/N)
17:	(Y/N)	18:	(Y/N)
19:	(Y/N)	20:	(Y/N)

SIGS Work Sheet

SIG Number :
SIG Access level :
SIG Name :
SIG Description :

Message Bases in SIG:

* Note * - Message base name not used in SIGS.TXT (use only for reference)

System Message Base # :
Message Base Flags (CRH):
Message Base Name :
Message Base Description:

System Message Base # :
Message Base Flags (CRH):
Message Base Name :
Message Base Description:

System Message Base # :
Message Base Flags (CRH):
Message Base Name :
Message Base Description:

System Message Base # :
Message Base Flags (CRH):
Message Base Name :
Message Base Description:

System Message Base # :
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Message Base Description:

System Message Base # :
Message Base Flags (CRH):
Message Base Name :
Message Base Description:

System Message Base # :
Message Base Flags (CRH):
Message Base Name :
Message Base Description:

Chapter 13 - Files on the Distribution Disk

Files located in the Main BBS directory are:

TURBO2.PRG - Your main BBS program
TURBO.OPT - Sample of the main Turbo Board option setup file
HELP.IDX - Index file for the Help system (Compiled in Tsysgen2)
HELP.TXT - Main Help file (this file goes in Main bbs directory)
TSYSGEN2.TOS - Turbo Board Version 2 System Generator program
UPDATE.PRG - Update program for Turbo V1 or Forem ST V2 BBS files
V2UPDATE.DOC- Text file containing any changes to the programs on your disk(s), as well as any corrections to the documentation.

Inside the SYSTEM folder are the following System Files:

ARC.SYS - Arctools, View and Extract from Arc
DBASE.SYS - NEW Turbo Board V2 Database
DBASEOLD.SYS - Forem ST compatible Database
DOORS.SYS - DOORS system (Forem ST compatible)
FILES.SYS - File System
INIT.SYS - Initialization functions
LOG.SYS - Log on and save Password functions
MESSAGE.SYS - Message System
SURVEY.SYS - Survey System (Forem ST compatible)
SYSOP.SYS - Sysop Functions
ULDL.SYS - File Protocols

Inside the DAT folder are:

BBSLIST.DAT - List of Other BBS systems (created by Turbo Board)
CONTIME.DAT - Varies allowed time/access during the day
MACROS.DAT - List of system macros (created by Sysop)
MENU.DAT - Sample Menu configuration (may be changed in Tsysgen2)
MKEYS.DAT - Function Keys text file (created by Sysop)
SIGS.DAT - Compiled SIGS.TXT file (compiled in Tsysgen2)
*.TDB - Turbo Database info files
*.FIL - Turbo Filesystem File directories

Inside the TXT folder are:

(Note - some files listed here will have to be created by the Sysop)

ACCNUM.TXT - Shown to new users if ACCOUNT NUMBERS is ON in TURBO.OPT
APPLYPW.TXT - Instructions for new user before entering data
BASEHELP.TXT - Help file for the Message bases
BATCH_UL.TXT - Help file displayed if user selects batch uploading
BIRTHDAY.TXT - Shown when a user has passed his birthday
CHAT.TXT - Text displayed when page is on and user requests chat
CONFMAIL.TXT - Instructions for user to send Conference Fmail
DATNOTE.TXT - Dated notice file. The datestamp will determine if the file will be shown or not.
DBUPLOAD.TXT - Displayed before user uploads a file to the database

EMAIL.TXT - Info to user about E-Mail deleting messages upon exit. (Shown when entering the E-Mail section)
FILECOM.TXT - Files section command menu (may be omitted)
FILES.TXT - Menu of download categories (Shown when entering the file area, Can also be FILES.LST)
FMAIL.TXT - Instructions to the user when they are to enter F-Mail
FTYPE.LST - List of File Application types
GETPHONE.TXT - Instructions for entering Phone number for new user
GR_RESET.TXT - File displayed if user aborts an alternate graphics text file
GRAPHICS.TXT - Alternate graphics menu selection file
HELP_FNK.TXT - File that will be shown when the HELP key is pressed locally
LOCKOUT.TXT - Sample 'undesirable' names file for excluding users
LOGIN.TXT - Optional bulletin file displayed before request for user name/ID
LOGOFF.TXT - Info to new user obtaining a user ID number at logoff
LOGOUT.TXT - Optional file displayed just before the user is disconnected.
MENU.TXT - Function list (Main Menu)
MESSCOM.TXT - List of message base subcommands
MHELP.TXT - Message editor commands - terse (displayed every time the message editor is entered)
MHELP1.TXT - Message editor commands - verbose (displayed when the user enters /? in the message editor)
MODEMDAT.TXT- Sample file set for Hayes compatible modems of modem commands to hang up/initialize the modem.
MSEA.TXT - Instructions to the user on how to use the "User search" function
NAME.TXT - Instructions on HANDLE/REAL NAME System
NEWUSER.TXT - Sample file, shown after new user has completed his registration. (Not shown to 'guests'.)
NOTICE.TXT - Bulletin file displayed before System Bulletins on logon
PROMPT.TXT - SysOp defined prompts file for the BBS
PWCOM.TXT - SysOp menu when at the PW> prompt
PWFULL.TXT - Notice displayed to use attempting to save password when the system is full
PWINFO.TXT - Text displayed to the new user before requesting they enter a password for use on the system
R_EMACS.TXT - Help file for the R_EMACS full screen message editor
SIGHELP.TXT - Help file for SIG Menu
SIGS.TXT - SIG setup file
SYSMOD.TXT - SysOp Mode command list (SysOp mode menu)
TDBASE.LST - Turbo Database list file
TERMPAR.TXT - List of terminal types displayed to user when selecting their terminal type
UTILITY.TXT - Sample Sub Menu Text file
WELCOME.TXT - System welcome message, displayed at logon

Compressed LZH files on the disk are:

FCSHEL12.LZH - Contains FC Shell program, allows i/o redirection
HELP.LZH - Contains HELP.TXT file
PRGRMMR.LZH - Contains TURBO2.H file and a few other Programmer files
R_EMACS.LZH - Contains R-Emacs Full Screen message editor

Turbo Board and Tsysgen will create additional files when run. They will be found the MESAGE subdirectory. These files and brief descriptions are:

MESAGE0.DAT - The E-Mail data file.
MESAGE0.IDX - The E-Mail stack index
MESAGE0.ISM - The E-Mail index file

The above three files will also be created by SysGen for each message base you set up. For the message bases the 0 will be replaced with the message base number.

DOWNLOAD.LOGif created by the SysOp, Turbo Board will append to this text file info on all downloads
TURBO.DAT - Created when a user executes a Doors program, for Turbo Board to pass information to the Doors program. FOREM.DAT will also be created for older doors games
TURBO.LOG - The system log when LOG TO DISK is ON in TURBO.OPT, or set using the P command while in the SysOp mode
TPAS.DAT - The password data file, created by TSYSGEN2.TOS
TPAS.IDX - Password index file, created by TSYSGEN2.TOS
UPLOAD.LOG - If created by the Sysop, this text file will be appended to by Turbo Board with info on all uploads
MASK.DAT - File of password validation masks, created by TSYSGEN2.TOS

Shareware Disks

There are also two Shareware disks, one for Atari F-Net files, and the other for Fido-net files. Please note that these files are presented to you with the understanding that if you decide to use any of these programs, that you will compensate the Authors for their work. We do not support any of these programs, you will have to contact the Authors themselves in regards to support.

Chapter 14 - Obtaining Support

On the next page you will find a Turbo Board action request form. If you are having a problem, find a bug, or have an enhancement you feel could become part of the Turbo Board package, please fill out this form and send it to us. We appreciate all suggestions on how to improve this software.

Turbo Board Support BBS

There is a Turbo Board Support BBS available for your use at 1-416-274-1225. The latest versions of Turbo Board, as well as many shareware support programs, are available for downloading by registered SysOps on this BBS. When calling the support BBS for the first time be sure and mention that you are a registered SysOp so the records may be checked and access to the Turbo Board programs provided. Problems, bug reports and enhancement suggestions may be left on the Turbo Board Support BBS also.

Please note, as of Oct 4th 1993, our area code will change from 416 to 905.

F-Net Network and Conference Support

You can reach our Support board by sending an FNET message to node 18, which just happens to be our FNET node address. We also have two Conferences available on the Fnet network system.

Turbo Board V2 Technical Support	45523	Lead node 18
Turbo Board Sysop Conference	45521	Lead node 18

To receive these conferences on your board, you will need to also install the Fmailer, as well as Crossnet and it's support files.

Our Address:

Bitblit Systems
1580 Liveoak Dr
Mississauga, ON
Canada
L5E 2X6

Turbo Board Action Request

Here is a Sample Form to help you better understand how to report a bug or problem to us.

Name : _____

Address: _____
_____
_____

Voice Phone (5-8PM EST):_____ (We can call you collect)

Turbo Board Version 2.__ Release Date: __/__/__

Turbo Board Serial Number:_____

Atari Model:_

Programs in AUTO folder:

_____
_____
_____

Accessory files loaded:

_____
_____
_____

Door Games Installed:

_____
_____
_____
_____

Problem:

Please write down any codes seen. Attach Screen Dump printout (alt-Help) and log files, if these will help explain the problem. We need to know HOW to Reproduce a problem so if you can, try to figure out how to reproduce the bug.

_____
_____
_____
_____
_____
_____
_____

Suggestions:

_____
_____
_____

Appendix A - File Structures

The C structures of the system files used by Turbo Board are shown below. This is for your use in developing utilities/doors programs that may need to access/modify the information contained in the files. Note: Turbo Board ST is compiled using the Borland Turbo C for the ST C Compiler. If you are using a different C compiler or language, then your programs may not be able to read the data properly (when using the formats shown below) due to differences in the packing methods used. The actual TURBO2.H file shown here is located in the PRGRMMR.LZH file on your release disk, along with a few other programs, and source files.

TURBO2.H

```
/* Turbo Board ST Version 2 - Main Structures - By Bill Miller  */

/*   Copyright 1990-1991 by Bitblit Systems  */

/* This information may only be used by people who wish to create an online
   program for Turbo Board Version 2.  It may NOT be used for any other
   purpose, OR by anyone programming a competitive BBS program, without the
   express written consent of Bitblit Systems.   */

/*  Any inquiries may be sent to:

     Bitblit Systems
     1580 Liveoak Dr
     Mississauga ON
     Canada L5E 2X6
*/

#define MAXPW  2000      /* size of pw file */
#define MAXMESS 500      /* size of message bases */
#define MAXLINES 20      /* max lines in message */
#define MAXSIG 16        /* max SIG's */
#define MAXBASE 16       /* max bases under 1 SIG */


/* MENU.DAT  file structure */
typedef struct {
   char ID;            /* menu ID number, 0=main menu */
   char smid;          /* if type # then smid = next sub menu ID
                       if type % then smid = previous menu ID*/
   int access;         /* access for any entry */
   int attrib;         /* flags: check contime, write user dat files */
   char type;          /* entry type "!@#$%^" or main menu function letter */
   char key;           /* actual ascii code used to execute, case ignored*/
   char pars(41);      /* any parameters used for some types */
} MENTRY;
/*
valid type's:
   ! = executable
   @ = type text file
```

```
  # = sub-menu
  $ = macro
  % = previous menu
  ^ = main menu

attrib:
  bit0 = write TURBO/FOREM.DAT & DORINFO1.DEF files if executable type (!)
  bit1 = use contime.dat doors access level for any entry (column 3)
*/

/* CONFIG.DAT system configuration file */
typedef struct {
    long callno;            /* caller number */
    char nbbs;              /* number of message bases */
    long nmess;             /* total messages in system */
    char ndrives;           /* number of drives online */
    char ndirect;           /* number of download directories */
    char subdir (20)(9);    /* names of download directories */
    int pwnum;              /* size of password file */
    int mconf(65);          /* current number of messages allowed in each base */
    int cmess(65);          /* next message number  in each base */
    int nconf(65);          /* max number of messages in each base */
    int hmess(65);          /* high message on message base */
    char conf(65)(41);      /* names of message bases */
    char textcolor;
    char backcolor;
    char drvlist(9);        /* drive search order (not used, see TURBO.OPT)*/
    char defdir(37);        /* default directory (not used, see TURBO.OPT)*/
    long flags;             /* various system flags (saved command options) */
                            /* Bit:
                                     0 = monthly.bat flag
                                     1 = chat mode on/off
                                     2 = log to disk on/off
                                     3 = guest allowed
                                     4 = accounting on/off
                                     5 = new user account number
                                     6 = spare
                                     7 = color monitor
                                     8 = survey at new user logon
                                     9 = email deleted after each user
                                    10 = message to sysop as Email
                                    11 = Uploads to sysop only
                                    12 = Logon bulletins on/off
                                    13 = Credit for upload time
                                    14-31 spare
        */

  int counters(10);         /* various system counters */
                            /*    0 = UL/DL ratio
                                  1 = user timeout in 1/60 seconds
                                  2 = Fmail auto delete in days
                                  3 = FNET default message base
```

```
                                    4 = Safs in from mailer  */
  long fnum;                  /* number of next download file */
  char expandc(6);
}CONFIG;


/* SIGS.DAT header structure */
typedef struct{
  int maxsig;                          /* currently 16 SIG's max */
  int maxbase;                         /* currently 16 bases/SIG */
  int signum;                          /* number of SIG's  16 max */
  int siglevel(MAXSIG);                /* SIG access level */
  char Bmap(MAXSIG)(MAXBASE);          /* Bmap(SIG)(MAXBASE) = Real Base number */
  char bflg(65);                       /* Base flags indexed from 1*/
  char order(64);                      /* order of bases if NO sigs (signum = 0) */
  char *signame(MAXSIG);               /* Name of SIG */
  char *sigdesc(MAXSIG);               /* Description of SIG */
  char *basedesc(64);                  /* Message base description */
}SIGHDR;

/* bflg:        bit0 = handles only
                bit1 = default to handle, user can toggle with /mf
                bit2 = default to real, user can toggle
                bit3 = don't delete conf mail
                if bit0,1 & 2 are OFF then real name only
*/


/* Validation mask  MASK.DAT */
typedef struct {
  int  vaccess;
  long vpriv;
  long vrbase1,vrbase2;
  long vebase1,vebase2;
  long vfunct;
  long vusr;
  int vdtime,vclimit,vdcalls,vtilim,vctlim,vulim,vdlim;
  int vdbulim,vdbdlim,vmailim,vmeslim;
  int vdbaccess;
  long vfbase;
  int varclim;
  int vfnetlim;
  int vfnet_level;
  int vuldl, vkuldl;              /* upload/download ratios */
  long vxpriv;                    /* extended privileges */
  long vconful1,vconful2;         /* bit map of allowed confmail uploads */
  long vconfdl1, vconfdl2;        /* bit map of allowed confmail downloads */
  long vsysfnk;                   /* bit map of allowed Sysop functions */
  int vfedit;                     /* bit map of allowed File edit functions */
  char extend(106);
}VMASK;
```

```
/* User password file entry   TPAS.DAT  */
typedef struct {
   int  rec;                    /* record number in pas.dat */
   char id(13);                 /* password */
   char name(31);               /* real name */
   char phone(13);              /* phone number */
   int  age;                    /* age, auto updated */
   char lfeed;                  /* line feeds on/off */
   int  cls;                    /* computer type */
   int  calls;                  /* number of calls */
   char last(3);                /* last call date */
   char first(3);               /* first call date */
   int  dl;                     /* number of downloads */
   int  up;                     /* uploads */
   int  mess;                   /* messages sent */
   int  dbase;                  /* data base files read */
   int  ubase;                  /* data base files uploaded */
   int  mail;                   /* Email messages sent */
   int  access;                 /* access level for download and doors */
   int  dbaccess;               /* data base access level */
   long priv;                   /* privilege bitmap */
   long rbase1,rbase2;          /* read message bases bitmap*/
   long ebase1,ebase2;          /* enter message bases bitmap */
   long funct;                  /* commands bitmap */
   long usr;                    /* usr functions bitmap */
   int  dtime;                  /* daily time limit */
   int  climit;                 /* daily call limit */
   int  dcalls;                 /* daily calls remaining */
   int  tilim;                  /* daily time limit */
   int  ctlim;                  /* call time limit */
   int  ulim;                   /* upload limit */
   int  dlim;                   /* download limit */
   int  dbulim;                 /* database upload limit */
   int  dbdlim;                 /* database read limit */
   int  mailim;                 /* Email limit */
   int  meslim;                 /* enter message limit */
   char accnum(10);             /* account number */
   int  himess(65);             /* high message read counters */
   int  moncon;                 /* month connect time */
   int  dai_up;                 /* daily counters */
   int  dai_dn;
   int  dai_mes;
   int  dai_mai;
   int  dai_dbu;
   int  dai_dbd;
   int msg_delay;               /* continuous scroll delay time */
   long fbase;                  /* bitmap of allowed dl directories */
   long ufbase;                 /* user set bitmap of Scan ALL directories */
   long urbase1,urbase2;        /* user set bitmap of READ ALL NEW Mes bases */
   unsigned char arclim;        /* arcdl lim */
   char street(41);             /* rest of the address */
```

```
  char city(21);
  char state(3);
  char zip(11);
  unsigned char fnetlim;
  unsigned char dai_fnet;
  unsigned char fnet_level;
  char last_file(3);
  unsigned char lines;
  unsigned char uldl;

/****** Extended user record (not in version 1.0) ******/

  char alias(31);              /* user alias */
  char birth(3);               /* birth date MDY */
  char kuldl;                  /* Kilobyte upload/download ratio */
  char mask;                   /* mask number 0 -> 99 (255 = not set)*/
  int batpend;                 /* number of pending batch uploaded files */
  unsigned long bytesup;       /* bytes uploaded */
  unsigned long bytesdl;       /* bytes downloaded */
  long xpriv;                  /* extended privileges */
  long conful1,conful2;        /* bit map of allowed confmail uploads */
  long confdl1, confdl2;       /* bit map of allowed confmail downloads */
  long sysfnk;                 /* bit map of allowed Sysop functions */
  int fedit;                   /* bit map of allowed File edit functions */
  char extend(42);
}PWORD;


/* TPAS.IDX  Structure */
typedef struct {
    int ptail;
    int pentry(MAXPW+1);
}PSTACK;


/* MESAGEnn.IDX Structure */
typedef struct {
    int mtail;
    int mentry(MAXMESS+1);
}MSTACK;


/* MESAGEnn.ISM Structure */
typedef struct {
    int  irec;                 /*record number in data file*/
    int  inum;                 /*message number*/
    int  ilevel;               /*user level if sysusr message*/
    char ifrom(31);            /*from users name*/
    char itcl(31);             /*to users name*/
    char istat;                /*message status*/
    int irepnum;               /*message that this message is a reply to*/
    int inode;                 /* destination node */
```

```
    unsigned int ird_cnt;              /*times this message has been read*/
}MINDEX;


/* MESAGEnn.DAT Structure */
typedef struct {
    int num;
    int node;                          /* destination node */
    int level;
    char tcl(31);
    char from(31);
    char date(3);
    char time(10);
    char recv(3);
    char status;
    char subject(81);
    unsigned  char count;
    char lines(MAXLINES) (76);
    int repnum;
    int onode;                         /* originating node */
    char tnode(31);                    /* name of originating node */
}MDAT;

/*message status codes:
    bit 0 = 1-locked 0-unlocked
    bit 1 = 1-from anonymous
    bit 2 = 1-to anonymous
    bit 3 = 1-sysusr message
    bit 4 = 1-system message
    bit 5 = 1-received
    bit 6 = 1-Fmail/Conf Mail
    bit 7 = 1-extended message
*/


/*  *.TDB file structure */
typedef struct{
   char  fname(13);            /* filename */
   char  uploader(31);         /* uploader name */
   char  desc(61);             /* description */
   char  date(3);              /* upload date */
   int access;                 /* access level */
   int ID;                     /* menu identification number*/
   int attrib;                 /* record attribute bits */
   long  length;               /* file length */
}TDB;

/* attrib bits:
   bit 1 = off-line
   bit 2 = free DL
   bit 3 = deleted
   bit 4 = sub-menu
```

```
   bit 5 = (sub-menu) list fname instead of menu
   bit 6 = (sub-menu) show fname before listing menu entries
   bit 7 = (sub-menu) show fname only on entry to sub-menu
*/


/* *.FIL file directory structure */
typedef struct {
   char fname(13);          /* filename */
   char fdate(3);           /* date mm/dd/yy */
   long flength;            /* length */
   char flang(8);           /* whatever... not used */
   int flags;               /* 16 assorted bit flags, only 3 used:
                                  bit 1 = archived (off-line file)
                                  bit 2 = free download
                                  bit 3 = deleted flag */
   char  rating;            /* uploader file rating 1 - 100 */
   char fdesc(5)(80);       /* description */
   char fapp;               /* application */
   char fascii;             /* ascii/binary flag */
   int  flevel;             /* access level */
   long frd_cnt;            /* download count */
   long fnum;               /* file number */
   char fuser(31);          /* uploader */
   char lread(3);           /* last download date*/
}TFILE;


/* HELP.IDX  file structure */
typedef struct {
    char topic(61);
    long loc;
}HIDX;


/* FNETMAIL.DAT file structure */
typedef struct {
   int  base;          /* message base the message is in */
   int  pos;           /* record number in message base */
   int  dest;          /* destination node number */
   int  save;          /* 1 if message is not to be deleted */
}FNETMAIL;
```

Appendix B - Notice of Registered Trademarks

Atari, Atari ST, Mega ST, STacy, STe, and TOS are trademarks of Atari Corporation
FoReM ST is a trademark of Commnet Systems
Hayes is a trademark of Hayes Microcomputer Products, Inc.
Microsoft and MSdos are trademarks of Microsoft Corporation
UltraScript is a trademark of Imagen Inc.
USRobotics and Courier HST are trademarks of USRobotics, Inc.
Word Perfect is a trademark of Word Perfect Corp.

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